BLM LIBRARY
88081803

ENT OF THE INTERIOR

REAU OF LAND
MANAGEMENT

Central Yukon Record of Decision and Approved Resource Management Plan

November 2024

HD
243
.A4
C465
2024
c.2

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Central Yukon Record of Decision and Approved Resource Management Plan

November 2024

BLM Library
Denver Federal Center
Bldg. 85, OC-521
P.O. Box 25047
Denver, CO 80225

BLM's Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

DOI-BLM-AK-F030-2013-0062-RMP-EIS
BLM/AK/PL-21/002+1610+F03

Prepared by:
U.S. Department of the Interior
Bureau of Land Management

In cooperation with:
U.S. Fish and Wildlife Service
Allakaket Tribal Council
Ruby Tribal Council
Koyukuk Tribal Council
Tanana Tribal Council
Nulato Tribal Council
Venetie Tribal Council
State of Alaska

Cover photo: Sukakpak Mountain from the north at mile post 203; photo by Bob Wick

#1484550708 ID:88081803
HD
243
.A4
C465
2024
c.2

Table of Contents

Acronyms or Abbreviations v

1. Record of Decision 1-1

1.1 Introduction 1-1

1.2 Decision 1-2

1.3 Alternatives 1-2
1.3.1 Alternative A (No Action Alternative) 1-4
1.3.2 Alternative B 1-5
1.3.3 Alternative C1 1-6
1.3.4 Alternative C2 (Preferred Alternative from the Draft RMP/EIS) 1-6
1.3.5 Alternative D 1-7
1.3.6 Alternative E (Proposed and Approved RMP) 1-8
1.3.7 Alternatives Eliminated from Detailed Analysis 1-8
1.3.8 Future Travel Management Planning 1-9

1.4 Clarifications and Modifications since the Proposed RMP 1-9

1.5 Management Considerations and Decision Rationale 1-12
1.5.1 ANILCA Section 810 1-13
1.5.2 Designation of Areas of Critical Environmental Concern 1-17
1.5.3 ANCSA 17(d)(1)s and PLO 5150 1-17

1.6 Application of the Approved RMP to Existing Projects, including Renewals and Extensions 1-19

1.7 Mitigation Measures 1-20

1.8 Plan Monitoring 1-21

1.9 Public Involvement 1-22
1.9.1 Public Scoping 1-22
1.9.2 Preliminary Alternatives Outreach 1-23
1.9.3 Issues Considered 1-23
1.9.4 Public Review of and Comment on the Draft RMP/EIS 1-23
1.9.5 Protest of the Proposed RMP/Final EIS 1-25
1.9.6 Governor's Consistency Review 1-26

1.10 Consultation and Coordination 1-28
1.10.1 Intergovernmental and Interagency Cooperation 1-28
1.10.2 BLM Alaska Resource Advisory Council Collaboration 1-28
1.10.3 Consultations with Tribes and Alaska Native Corporations 1-29
1.10.4 National Historic Preservation Act Section 106 Consultation 1-29
1.10.5 US Fish and Wildlife Service Consultation 1-29
1.10.6 National Oceanic and Atmospheric Administration Consultation 1-29

1.11 Availability of the Approved RMP 1-30

1.12 Approval 1-30

2. Approved Resource Management Plan 2-1

2.1 Purpose of and Need for the Resource Management Plan 2-1
- 2.1.1 Planning Area 2-1
- 2.1.2 Scoping Issues and Public Involvement 2-2
- 2.1.3 Issues Considered 2-3
- 2.1.4 Issues Considered but Not Further Analyzed 2-3
- 2.1.5 Planning Criteria and Legislative Constraints 2-4
- 2.1.6 Planning Process 2-6
- 2.1.7 Related Plans 2-6
- 2.1.8 Policy 2-7

2.2 Introduction to the Management Decisions 2-7

2.3 Management Decisions: Resources 2-8
- 2.3.1 Air Quality and Climate 2-8
- 2.3.2 Soils 2-8
- 2.3.3 Water, Fish, and Riparian and Wetland Vegetation 2-10
- 2.3.4 Vegetation (Including Nonnative Invasive Species) 2-13
- 2.3.5 Wildlife 2-15
- 2.3.6 Species of Special Concern (Including Special Status Species) 2-17
- 2.3.7 Wildland Fire 2-18
- 2.3.8 Cultural Resources 2-19
- 2.3.9 Paleontological Resources 2-23
- 2.3.10 Visual Resources 2-23
- 2.3.11 Lands with Wilderness Characteristics 2-24

2.4 Management Decisions: Resource Uses 2-25
- 2.4.1 Forestry 2-25
- 2.4.2 Lands and Realty 2-26
- 2.4.3 Energy and Minerals 2-32
- 2.4.4 Recreation and Visitor Services (Including Backcountry Conservation Areas) 2-39
- 2.4.5 Travel and Transportation Management 2-41

2.5 Management Decisions: Special Designations 2-44
- 2.5.1 Areas of Critical Environmental Concern 2-44
- 2.5.2 Wild and Scenic Rivers 2-49
- 2.5.3 National Trails 2-49
- 2.5.4 Wilderness Study Areas 2-51

2.6 Management Decisions: Social and Economic Conditions 2-52
- 2.6.1 Hazardous Materials 2-52

2.7 Future Public Involvement 2-53

2.8 Management Plan Implementation 2-53

2.9 RMP Evaluation, Amendment, Maintenance, and Monitoring 2-54
- 2.9.1 RMP Evaluation 2-54
- 2.9.2 RMP Amendments 2-54
- 2.9.3 RMP Maintenance 2-55
- 2.9.4 RMP Monitoring 2-55
- 2.9.5 Adaptive Management 2-56

3. References 3-1

Appendices

A Maps
B Collaboration and Coordination
C Relationship to BLM Policies, Plans, and Programs
D ANILCA Access—Implementing Sections 811 and 1110(a)
E Standard Operating Procedures and Fluid Mineral Leasing Stipulations
F Adaptive Management Framework
G Aquatic and Riparian Resource Desired Conditions and Objectives
H Dall Sheep and Caribou Habitat Management
I Land Tenure
J Recreation Management Areas and Backcountry Conservation Areas
K Reclamation Requirements for All Surface-Disturbing Activities
L ANILCA Section 810 Final Evaluation
M Areas of Critical Environmental Concern
N The BLM State Director’s Response to the Alaska Governor’s Consistency Review

This page intentionally left blank.

ACRONYMS OR ABBREVIATIONS

Acronyms or Abbreviations	Full Phrase
ACEC	area of critical environmental concern
ANCSA	Alaska Native Claims Settlement Act of 1971
ANILCA	Alaska National Interest Lands Conservation Act
AO	Authorized Officer
BCA	Backcountry Conservation Area
BLM	Bureau of Land Management
BMP	best management practice
CAMA	Central Arctic Management Area
CEQ	U.S. Council on Environmental Quality
CFR	Code of Federal Regulations
CSU	conservation system units
CYFO	Central Yukon Field Office
Dingell Act	John D. Dingell, Jr. Conservation, Management, and Recreation Act
DSHA	Dall Sheep Habitat Area
EIS	environmental impact statement
EPA	Environmental Protection Agency
ERMA	extensive recreation management area
FLPMA	Federal Land Policy and Management Act of 1976
GPS	global positioning system
IM	Instruction Memorandum
INHT	Iditarod National Historic Trail

Acronyms or Abbreviations	Full Phrase
LWCs	lands with wilderness characteristics
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NNIS	nonnative, invasive species
NPS	National Park Service
NRHP	National Register of Historic Places
NSO	no surface occupancy
OHV	off-highway vehicle
PLO	Public Land Order
R&PP	Recreation and Public Purposes
RAC	Resource Advisory Council
RMP	resource management plan
RMZ	resource management zone
RNA	research natural area
ROD	Record of Decision
ROW	right-of-way
SHPO	State Historic Preservation Officer
SOP	standard operating procedure
SRMA	special recreation management area
SSS	special status species
SWMFP	Southwest Management Framework Plan

Acronyms or Abbreviations	Full Phrase
TMA	travel management area
TMP	travel management plan
U.S.	United States
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
VRM	visual resource management
WSA	wilderness study area
WSR	wild and scenic river

This page intentionally left blank.

RECORD OF DECISION

This page intentionally left blank.

1. RECORD OF DECISION

1.1 Introduction

The Federal Land Policy and Management Act of 1976[1] (FLPMA) directs the United States (U.S.) Department of the Interior, Bureau of Land Management (BLM) to develop and periodically revise resource management plans (RMPs), which guide the management of BLM-managed lands. This Record of Decision (ROD) approves the attached Approved RMP to manage public lands administered by the BLM Central Yukon Field Office (CYFO) within the Central Yukon Planning Area. The background and rationale for approving the proposed decisions, as well as clarifications and modifications made to address protests to the Proposed RMP/Final Environmental Impact Statement (EIS), are described in this ROD.

The planning area boundary encompasses approximately 56 million acres; however, within that boundary, the BLM only manages approximately 13.3 million acres (**Appendix A**, Maps, **Map 1.1**, **Map 1.2**, and **Map 1.3**). Federal lands managed by other federal agencies within the planning area include portions of the Gates of the Arctic National Park and Preserve; the Koyukuk, Innoko Northern Unit, Nowitna, and Kanuti National Wildlife Refuges; and the U.S. Army Tanana Flats and Donnelly training areas. **Table 1-1** lists the acres of BLM-managed lands, other federal agency lands, and lands managed by other entities.

Table 1-1, Surface Management Responsibilities in the Planning Area

Land Status	Surface Acres	Percentage of the Planning Area
State	25,435,000	45.5
BLM, the surface decision area	13,264,000	23.8
U.S. Fish and Wildlife Service	7,254,000	13.0
Alaska Native lands patented or interim conveyed	6,892,000	12.3
Water or undetermined	1,376,000	2.5
Department of Defense, Air Force, Army, and Army Corps of Engineers	1,304,000	2.3
Private	143,000	0.3
Alaska Native allotment	108,000	0.2
Local government	67,000	0.1
Other federal	1,000	0.0
Total	**55,844,000**	**100.0**

Source: BLM GIS 2017, updated in 2024, Note: Acres are rounded to the nearest 1,000. The BLM surface decision area is highlighted in yellow. The total percentage may not equal 100, due to rounding. The Department of Defense's surface and mineral estate are withdrawn and would be retained under all alternatives. As such, this Approved RMP does not make other decisions on Department of Defense land, except for designating the travel management areas.

---

[1] 43 United States Code [U.S.C.] 1701 et seq.

The Approved RMP applies only to the BLM-managed public lands within the planning area. The planning decisions and descriptions in the Approved RMP do not change land use management for National Wildlife Refuge lands, National Park Service (NPS) lands, Department of Defense lands, or their subsurface lands; nor do they apply to private lands, Alaska Native Corporation lands, or lands conveyed to the State of Alaska, Alaska Native Corporations, or to private individuals.

1.2 Decision

The attached RMP is approved by the signature of BLM Alaska State Director Steve Cohn on November 12, 2024, in **Section 1.12**, Approval, of this document. The decisions in this ROD and Approved RMP replace the management direction for two land use plans: the Utility Corridor RMP (BLM 1991) and the Central Yukon RMP (BLM 1986a). The Approved RMP also will provide an RMP for a portion of the lands currently covered by the Southwest Management Framework Plan (SWMFP; BLM 1981) and unplanned lands near Fairbanks.

The BLM prepared this Approved RMP under the authority and regulations (43 Code of Federal Regulations [CFR] 1600) implementing FLPMA. The RMP includes broad land use plan decisions that provide the BLM CYFO direction for managing resources and resource uses in the planning area. The BLM prepared an EIS for this plan in compliance with the National Environmental Policy Act of 1969 (NEPA). Land use plan decisions identified in the Approved RMP are final and become effective when this ROD is signed.

1.3 Alternatives

An RMP provides broad guidance for managing public lands and documents the decisions that guide future land management actions and subsequent site-specific implementation decisions. FLPMA directs the BLM to develop RMPs as the primary means to identify and allow for appropriate uses of BLM-managed land. RMP decisions establish goals and objectives for resource management (desired outcomes) and the identified uses (allocations) that are allowable, restricted, or prohibited to achieve the goals and objectives. Management actions are also identified where they could help to achieve desired outcomes; these actions include measures or criteria that may guide both day-to-day and long-term management. All decisions are pursuant to the multiple-use and sustained-yield mandate of FLPMA.

NEPA requires the development and consideration of a reasonable range of alternatives, including a no-action alternative, to analyze impacts and guide decision-makers in developing and selecting the Approved RMP. The Approved RMP interdisciplinary team used the BLM planning process according to the BLM's Land Use Planning Handbook (BLM 2005) to develop a reasonable range of alternatives for the RMP that would (1) meet FLPMA's multiple-use and sustained-yield mandates; (2) address the planning issues compiled from the public, cooperating agencies, and the BLM interdisciplinary team; and (3) fulfill the purpose and need for the RMP (see Section 1.2 of the Proposed RMP/Final EIS) by addressing management needs and opportunities for the planning area.

The BLM developed five action alternatives and analyzed them along with the no-action alternative in detail in the Proposed RMP/Final EIS. The alternatives included different combinations of management direction to address issues and resolve conflicts among resources and resource uses. In addition to addressing issues, alternatives needed to meet the stated purpose of and need for the RMP, be technically and economically practical or feasible, and not be remote or speculative. Each full alternative constituted a complete land use plan that provided a framework for multiple-use management of the full spectrum of resources, resource uses, and resource programs on BLM-managed lands within the planning area.

The six alternatives (five action alternatives and one no-action alternative) carried forward for detailed analysis in the Proposed RMP/Final EIS were developed in response to issues and concerns identified through internal agency scoping, public scoping, the areas of critical environmental concern (ACECs) comment and nomination period, the wild and scenic river (WSR) study process, the preliminary alternatives outreach period, and the Draft RMP/EIS public comment period. All the action alternatives share common goals and objectives; however, they address these goals and objectives to varying degrees with the potential for different long-range outcomes and conditions.

Under all action alternatives, the BLM would implement the measures set forth in Secretarial Order 3403[2] and subsequent BLM Permanent Instructional Memoranda[3] to fulfill the BLM's trust responsibility to federally recognized Alaska Native Tribes in the stewardship of federal lands and waters. Local Indigenous knowledge will be valuable in implementing the management actions in this Approved RMP as well as aiding in the monitoring and development of adaptive management strategies. The BLM would seek to engage tribal governments in co-stewardship opportunities in all these endeavors.

All action alternatives propose collaboration with adjacent landowners, federal and State agencies, Tribes, communities, other agencies, individuals, and organizations, as needed, to monitor and implement decisions to achieve desired resource conditions.

Under all alternatives, the BLM would apply best management practices (BMPs) and other site-specific mitigation to all resource uses, as appropriate, and would employ adaptive management per U.S. Department of the Interior and BLM policy. The BLM is directed to identify, consider, and, as appropriate, require mitigation to address reasonably foreseeable impacts on resources from public land uses consistent with the mitigation hierarchy, as defined in the U.S. Council on Environmental Quality (CEQ) regulations at 40 CFR 1508.20 and with Department of the Interior and BLM policy.

Specific compensatory mitigation measures would be developed before authorization of implementation-level actions. This would be done in alignment with the resource objectives of this Approved RMP (see **Sections 2.1** through **2.4** of the Approved RMP) and in compliance with the most recent regulatory guidance. Currently, such guidance includes the BLM mitigation policy (BLM 2021a), relevant manuals and handbooks (BLM 2021b, 2021c), and the Memorandum of Agreement between the Environmental Protection Agency (EPA) and the Department of the Army (Army and EPA 2021) related to the mitigation sequence for wetlands in Alaska under the Clean Water Act.

Under all alternatives, the BLM would apply standard operating procedures (SOPs) to all actions on public land, as appropriate, whether the BLM itself implements the action or authorizes it to be implemented by another individual, organization, or agency. The SOPs provided in **Appendix E**, Standard Operating Procedures and Fluid Mineral Leasing Stipulations, were based on the best information available during development of the RMP/EIS. Covered actions and activities would include FLPMA leases and permits, special recreation permits, oil and gas activities, renewable energy activities, mining plans of operation, and authorizations for rights-of-way (ROWs).

---

[2] Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters.
[3] BLM PIM 2022-011 Co-Stewardship with Federally Recognized Indian and Alaska Native Tribes Pursuant to Secretary's Order 3403.

The BLM would monitor all resources to determine the success of terms, conditions, stipulations, SOPs, and compliance with applicable state and federal laws. The BLM would use its assessment, inventory, and monitoring protocols as a key basis of monitoring resource conditions on BLM-managed lands.

Where restrictions appear to prohibit or prevent wildland fire or fuels management, the BLM Authorized Officer (AO) retains the authority to determine whether fire and fuels management can occur in the area.

The Alaska National Interest Lands Conservation Act (ANILCA) designated 104 million acres for conservation by establishing or expanding national parks, wildlife refuges, WSRs, wilderness areas, forest monuments, conservation areas, recreation areas, and wilderness study areas (WSAs) to preserve them for future generations. ANILCA includes numerous provisions that apply to units that the act designates and to public lands in the planning area managed by the BLM, the NPS, and the U.S. Fish and Wildlife Service (USFWS). These provisions include the access provisions in ANILCA Sections 811, 1110, and 1323(b), which allow for motorized and nonmotorized access for subsistence and general public use on federally managed lands, including designated wilderness. **Appendix D**, ANILCA Access—Implementing Sections 811 and 1110(a), provides guidance on implementing the ANILCA access provisions.

ACEC designations would not prevent or preclude reasonable access to adjacent lands not managed by the BLM consistent with Section 1323(b) of ANILCA. ROW avoidance areas within ACECs are areas that would be available for authorized activities that may entail special stipulations or consideration of other site-specific alternatives to protect identified relevant and important values for the subject ACEC(s) involved. The BLM would work with any project proponent to design a project plan in ROW avoidance areas that meets the proponent's needs and protects relevant and important ACEC values.

1.3.1 Alternative A (No Action Alternative)

Alternative A satisfies the NEPA requirement at 40 CFR 1502.14, which states that agencies shall include a "no action," which provides the baseline against which to compare the other alternatives. Alternative A would continue the current management direction and practices, based on the Utility Corridor RMP (BLM 1991), Central Yukon RMP (BLM 1986a), SWMFP (BLM 1981), and other management decision documents (see Appendix J of the Proposed RMP/Final EIS for more details). These include special rules published in the *Federal Register*, such as special rules for off-highway vehicle (OHV) and recreation use.

Under Alternative A, the BLM would maintain all existing withdrawals in the planning area, including Public Land Order (PLO) 5150 (set aside in 1971 for a utility and transportation corridor) and maintain the recommendation for a FLPMA withdrawal of 49,000 acres from mineral entry location. Under Alternative A, there would be 18 existing ACECs and 8 research natural areas (RNAs), for a total of approximately 1.8 million acres, designated to protect relevant and important values and research opportunities.

Approximately 8.2 million acres would be open to locatable mineral entry, including lands withdrawn from mineral entry except for the location of metalliferous minerals (3.3 million acres). Of these open lands, 3.2 million acres are encumbered by State or Native selections. These selections segregate the lands from locatable mineral entry (43 CFR 2627.4.b) and remove the federal subsistence priority (ANILCA 102.3 and 804).

Alternative A would retain closures of 266,000 acres to mineral materials sales through management actions from previous RMPs and BLM WSA policy (see Chapter 3, Section 3.2.7, and Appendix J of the Proposed RMP/Final EIS for more details).

1.3.2 Alternative B

Alternative B emphasizes resource protection over other uses (see Appendix J of the Proposed RMP/Final EIS for more details). Planning for connectivity corridors (**Appendix F**, Adaptive Management Framework), adaptability to climate change, and protection of priority species was emphasized to a greater degree under this alternative than under the other alternatives, with less emphasis on resource development. The BLM would designate a total of 31 ACECs or RNAs (approximately 4 million acres), with special management to address a wide range of relevant and important values and research opportunities.

Alternative B identifies areas suitable as ecological benchmarks. This allows the BLM to establish quantitative planning objectives, to monitor the effectiveness of management decisions in meeting those objectives, and to use that information to inform adaptive management strategies. The ecological benchmarks would lie mostly on BLM-managed lands, including approximately 4.6 million acres of CYFO lands (see **Appendix F**).

Alternative B uses a variety of decisions to focus on priority habitats, including closing 2.3 million acres to fluid minerals beyond the 6.1 million that would remain withdrawn by PLOs, and recommending 599,000 acres for withdrawal from entry under the General Mining Law, pursuant to FLPMA. Approximately 11.6 million acres would be open to locatable mineral entry, including lands withdrawn from mineral entry except for the location of metalliferous minerals. Of these, 7.1 million acres would be encumbered by State or Native selections.

Management decisions for high-value watersheds would include ROW exclusion in the 100-year floodplain. Alternative B also proposes 11 suitable WSRs and 364,000 acres of land to be managed for wilderness characteristics as a priority over other resources.

Alternative B recommends a partial revocation of PLO 5150 in what is commonly known as the "outer corridor." This would allow for State of Alaska top-filed[4] lands to become effective selections where they exist on the approximately 1.4 million acres recommended for revocation.

Alternative B recommends a revocation of approximately 5.3 million acres of Alaska Native Claims Settlement Act of 1971 (ANCSA) 17(d)(1) withdrawals. If accepted by the Secretary of the Interior, these revocations would make lands available for selection and appropriation. This would include selection of land allotments by Alaska Native Vietnam-era veterans under Section 1119 of the John D. Dingell, Jr. Conservation, Management, and Recreation Act (Dingell Act).

Alternative B would close 5 million acres to mineral materials sales (see Chapter 3, Section 3.2.7, and Appendix J of the Proposed RMP/Final EIS for more details). Alternative B also introduces a backcountry conservation area in the outer corridor of PLO 5150, the Dalton Corridor; this backcountry conservation area would focus on providing semi-primitive recreational hunting opportunities.

---

[4] Section 906(e) of ANILCA gave the State of Alaska the right to make top-filings (future selection applications) for its land entitlement selections, subject to valid existing rights. These top-filings would become State-selected lands immediately on revocation of the PLO if following the revocation, the land is vacant, unappropriated, and unreserved.

In addition, there would be two special recreation management areas (SRMAs) and two extensive recreation management areas (ERMAs) under Alternative B.

1.3.3 Alternative C1

Alternative C1 emphasizes a blend of resource protection and resource development (see Appendix J of the Proposed RMP/Final EIS for more details). Connectivity corridors, adaptability to climate change, and priority species would be considered in the context of allowing for more minerals development and other resource uses than under Alternative B. Eight ACECs or RNAs (approximately 418,000 acres) would be designated. Management to protect relevant and important values would be less restrictive for resource uses than under Alternative B. Like Alternative B, Alternative C1 identifies areas suitable as ecological benchmarks. Benchmarks under Alternative C1 would incorporate approximately 2.4 million acres of BLM-managed lands administered by the CYFO (see **Appendix F**).

Alternative C1 would have fewer ACEC designations than Alternative B, but it proposes habitat-specific management for both Dall sheep and caribou (see **Appendix H**, Dall Sheep and Caribou Habitat Management). Two FLPMA withdrawals are proposed for locatable minerals under this alternative, relative to caribou and Dall sheep habitats. Management actions for the 100-year floodplain of high-value watersheds would be emphasized under Alternative C1 as ROW avoidance areas.

Alternative C1 proposes no suitable WSRs and no acres identified as managed for wilderness characteristics as a priority; however, it would apply management restrictions to minimize impacts on wilderness characteristics on 882,000 acres of BLM-managed lands. As under Alternative B, Alternative C1 recommends revocation of approximately 5.3 million acres of ANCSA 17(d)(1) withdrawals (revocations are only recommended through the Proposed RMP/Final EIS if the PLO was included in the Draft RMP/EIS) and a partial revocation of approximately 1.4 million acres withdrawn by PLO 5150. This would allow for State of Alaska top-filed lands to become effective selections where they exist on the approximately 1.4 million acres recommended for revocation and would allow for selection of Native allotments under the Dingell Act.

Alternative C1 combines the two SRMAs identified in Alternative B into one SRMA with multiple resource management zones (RMZs). Alternative C1 also identifies two ERMAs.

Alternative C1 would close 1.5 million acres to mineral materials sales (see Chapter 3, Section 3.2.7, and Appendix J of the Proposed RMP/Final EIS for more details). Under this alternative, approximately 12.1 million acres would be open to locatable mineral entry and appropriation; approximately 7.1 million acres of these would be encumbered by State or Native selections. Under Alternative C1, the BLM would recommend that 10,000 acres be recommended for withdrawal pursuant to FLPMA from mineral entry.

1.3.4 Alternative C2 (Preferred Alternative from the Draft RMP/EIS)

Alternative C2 emphasizes a blend of resource protection and resource development (see Appendix J of the Proposed RMP/Final EIS for more details). However, it reduces the acres set aside as ACECs or recommended for withdrawal from mineral entry and appropriation, while retaining the Toolik Lake RNA (77,000 acres). Management of habitat for caribou would be similar to management under Alternative C1, except there would be no proposed FLPMA withdrawals. There are no specific management actions for Dall sheep habitat under this alternative.

Alternative C2 would establish ROW avoidance areas in core caribou habitat, clustered pingo locations, and a narrow band of BLM-managed lands that extends toward Venetie that is bordered by State of Alaska lands to the north and USFWS lands to the south.

Alternative C2 proposes no suitable WSRs. Lands with wilderness characteristics (LWCs) would be managed to emphasize other multiple uses as a priority over protecting wilderness characteristics.

As under Alternative B, Alternative C2 recommends revocation of approximately 5.2 million acres of ANCSA 17(d)(1) withdrawals (revocations are only recommended through the Proposed RMP/Final EIS if the PLO was included in the Draft RMP/EIS); however, Alternative C2 also recommends a full revocation of PLO 5150. This would allow State of Alaska top-filed lands to become effective selections where they exist on the 2.1 million acres of land currently withdrawn under PLO 5150 (the Inner Dalton Corridor and outer corridor). The revocation of the 17(d)(1) withdrawals would also allow for selection of Native allotments under the Dingell Act. The Inner Dalton Corridor would be administratively designated as a utility corridor. This would emphasize this continuing function as a utility and transportation corridor to support the current and future projects. Alternative C2 would contain one SRMA and one ERMA.

Alternative C2 would close approximately 1.1 million acres to mineral materials sales (see Chapter 3, Section 3.2.7, and Appendix J of the Proposed RMP/Final EIS for more details); approximately 12.9 million acres would be open to locatable mineral entry; 7.8 million acres of these would be encumbered by State or Native selections.

1.3.5 Alternative D

Alternative D emphasizes management to facilitate resource development more than the other alternatives (see Appendix J of the Proposed RMP/Final EIS for more details). This alternative focuses on maximizing the development potential for BLM-managed lands. Management for habitat and resources relies on using current federal management guidelines without the use of habitat-specific or ACEC-specific management.

Climate change adaptability and priority species would be addressed by considering connecting existing conservation system units (CSUs) in the planning area, such as national wildlife refuges and national parks.

Alternative D would not designate any ACECs or RNAs; it also would not include SRMAs or ERMAs. LWCs would be managed to emphasize other multiple uses as a priority over protecting wilderness characteristics. This alternative does not propose any WSRs as suitable.

This alternative would not apply specific management to core caribou or Dall sheep habitat. The only areas excluded from ROWs would be in the existing Central Arctic Management Area (CAMA) WSA.

As under Alternative C2, Alternative D would recommend revocation of 5.2 million acres of ANCSA 17(d)(1) withdrawals (revocations are only recommended through this RMP if the PLO was included in the Draft RMP/EIS) and a full revocation of PLO 5150. Like under Alternative C2, this would allow 2.1 million acres of State of Alaska top-filed lands to become effective selections and would allow for selection of Native allotments under the Dingell Act. Also, similar to Alternative C2, the Inner Dalton Corridor would be administratively designated as a utility corridor to emphasize function as a utility and transportation corridor to support the current and future projects.

Alternative D would close 259,000 acres to mineral materials sales (see Chapter 3, Section 3.2.7, and Appendix J of the Proposed RMP/Final EIS for more details). Alternative D would not include any recommendations to withdraw lands from mineral entry or appropriation. Approximately 12.9 million acres would be open to locatable mineral entry; of these, 7.8 million acres would be encumbered by State or Native selections.

1.3.6 Alternative E (Proposed and Approved RMP)

Alternative E is the BLM's Proposed RMP, or Proposed Plan (see Appendix J of the Proposed RMP/Final EIS for more details). This alternative was developed after considering public comments on the Draft RMP/EIS, internal BLM discussions, and cooperating agency input. Alternative E included elements of Alternatives A, B, C1, and C2. For most resources, Alternative E mirrors Alternative C (either Alternative C1 or Alternative C2). ACECs proposed for designation under Alternative E follow watershed boundaries for fisheries-based ACECs; this is similar to Alternative B. The allocations associated with these ACECs consider the smallest area necessary to protect the relevant and important values, applying special management within defined buffers to protect 100-year floodplains, where such management is warranted.

Twenty-one ACECs or RNAs (approximately 3,611,000 acres) would be designated. Management to protect relevant and important values would be less restrictive for resource uses than under Alternative B, Alternative C1, and Alternative C2, depending on the ACEC. Like Alternative B, Alternative E identifies areas suitable as ecological benchmarks and connectivity corridors. Benchmarks under Alternative E would incorporate 4,622,000 acres of BLM-managed lands within the CYFO's administrative boundaries (see **Appendix F**).

In lieu of ACECs to protect caribou habitat, Alternative E would maintain protective management for the Galena Mountain and Ray Mountains core caribou habitats.

Alternative E proposes no suitable WSRs. LWCs would be managed to emphasize other multiple uses as a priority over protecting wilderness characteristics.

Unlike the action alternatives from the Draft RMP/EIS, Alternative E would not recommend revoking PLO 5150. Therefore, PLO 5150 would remain in place, which is the same as under Alternative A.

Alternative E would, however, include the recommendation that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs for the limited purpose of allowing for allotment selection by Alaska Native Vietnam-era veterans under the Dingell Act.

1.3.7 Alternatives Eliminated from Detailed Analysis

The BLM considered two alternatives that were considered but eliminated from detailed analysis because they did not meet the purpose of and need for the RMP or because they did not fall within technical, legal, or policy constraints for BLM-managed resources and resource uses. These alternatives and the BLM's rationale for not carrying them forward for detailed analysis are described in Section 2.3 of the Proposed RMP/Final EIS.

1.3.8 Future Travel Management Planning

This decision document approves only land use plan decisions with regard to travel management planning. The BLM will complete the final OHV designations and management decisions in a subsequent implementation-level travel management plan (TMP) for each of the four travel management areas (TMAs) identified in the Approved RMP (Dalton Corridor, CAMA lands, rest of planning area, and Fairbanks/military lands). The BLM will do this through an implementation-level decision process after the ROD is signed. Management would be consistent with Alternative A until those plans are in place (see Table 2-20 of the Proposed RMP/Final EIS).

The BLM will develop an implementation strategy to identify and prioritize the work needed to meet the Approved RMP's goals and objectives. The implementation plan will assist managers and staff to prepare budget requests and to schedule work priorities. The BLM will prepare supplementary rules, as necessary, to provide full authority to the BLM, pursuant to the BLM's authority under 43 CFR 8365.1-6.

Some decisions may take several years to implement and will require additional analysis and site-specific activity planning. Site-specific NEPA compliance can vary from a simple statement of conformance with the RMP and adequacy of existing NEPA analysis to environmental assessments or EISs that analyze several alternatives. Many decisions will be implemented as funding and staff availability allow, subject to national and statewide direction.

Section 2.4.5, Travel and Transportation Management, describes the process the BLM intends to follow to make the implementation-level decisions (also see **Appendix D)** including decisions that are covered by Sections 811,1110, and 1323 of ANILCA.

1.4 Clarifications and Modifications since the Proposed RMP

The BLM has clarified or modified information from the Proposed RMP/Final EIS, and these changes are reflected in the Approved RMP:

- The primary purpose of the lands withdrawn by PLO 5150 is to serve as a utility and transportation corridor and PLO 5150 is still fulfilling that purpose.
- WSAs such as the CAMA WSA are designated by acts of Congress, with management of the CAMA guided by BLM Manual 6330 – Management of Wilderness Study Areas (BLM 2012c) and ANILCA. The Approved RMP does not change management of the CAMA WSA as prescribed by ANILCA and current BLM policy. If the existing wilderness characteristics were to be compromised, the area's standing as a WSA designated by Congress would remain.
- ACECs are not CSUs; rather, they are a designation unique to the BLM that arise from FLPMA. ACECs are unique in that they allow for a wide variety of uses while addressing important resource concerns through carefully tailored management approaches that are informed by public and stakeholder input. While the Central Yukon RMP designates ACECs that include ROW avoidance and exclusion areas in order to address potential impacts on important resource values, ANILCA Section 1323(b) states that, notwithstanding any other provisions of law, and subject to terms and conditions prescribed by the Secretary of the Interior, the Secretary shall provide access to non-federally owned land surrounded by public lands managed by the Secretary under FLPMA (43 U.S.C. 1701-82), provided that such owner comply with rules and regulations

applicable to access across public lands. The BLM appreciates the economic and mineral potential of selected and conveyed ANCSA and State lands within the planning area (e.g., the East and West Wiseman Blocks owned by Doyon, Limited) and will work diligently with the State and ANCSA Corporations as the Secretary deems adequate to secure to the owner the reasonable use and enjoyment thereof.

- In **Section 1.5.1**, ANILCA Section 810, of the Approved RMP and in **Appendix L**, ANILCA Section 810 Final Evaluation, the cumulative case analysis for Section 810 of ANILCA was updated to accurately reflect the analysis. The cumulative case now acknowledges that the development of known deposits in the Ambler Mining District, Wiseman East and West deposits, and the Ray Mountains could significantly restrict subsistence uses and have a disproportionate negative impact on the environmental justice communities of Alatna, Allakaket, Anaktuvuk Pass, Evansville, Hughes, and Huslia; the development could also significantly restrict subsistence uses for the communities of Bettles, Coldfoot, and Wiseman.
- **Section 2.3.8**, Cultural Resources, of the Approved RMP correctly lists Galbraith Lake and Jim River ACECs as cultural ACECs. Appendix J, Land Management Allocations, of the Proposed RMP/Final EIS should have listed both Galbraith Lake and Jim River as Alternative E cultural ACECs. Chapter 2 of the Proposed RMP/Final EIS correctly listed these as designated ACECs and Appendix T of the Proposed RMP/Final EIS correctly discussed them as having relevant and important cultural values.
- The Approved RMP clarifies in **Section 2.4.2,** Lands and Realty, that if the BLM were to receive an application for a ROW, pursuant to Section 1431(j) of ANILCA, the BLM would work with the proponent to process the application consistent with applicable law.
- The Approved RMP clarifies in **Section 2.4.2,** Lands and Realty, that the BLM will not formally designate a corridor but will encourage colocation of new linear ROWs in potential utility and transportation corridors including the Dalton Highway Corridor. The Approved RMP identifies the Dalton Highway Corridor and the Ambler and Umiat corridors as areas where colocation could occur in the future.
- **Section 2.4.5**, Travel and Transportation Management, of this ROD and Approved RMP correctly only lists the Toolik Lake ACEC and the Galena Mountain and Ray Mountains Core Caribou Ranges as having OHV closures or timing limitations. However, in Appendix J, Section J.2, ACECs, of the Proposed RMP/Final EIS, OHV closures or timing limitations were incorrectly listed for the Indian River, Klikhtentotzna Creek, Sethkokna River, South Fork Koyukuk River, Upper Teedriinjik (Chandalar) River, and Wheeler Creek ACECs. In the Proposed RMP/Final EIS Appendix J, Land Management Allocations, Section J.6, Travel and Transportation Management, the seasonal limitations for OHV use (closed in summer) and timing limitations to summer OHV travel (no OHVs May 1 through June 30) were correctly described. Proposed RMP/Final EIS maps 2.64 through 2.66, Alternative E: Travel and Transportation Management, correctly displayed the allocations from Section J.6. The Proposed RMP/Final EIS Chapter 2, Alternatives, Table 2-1, correctly listed the acres for transportation management.
- The Approved RMP clarifies that this plan makes only planning decisions for travel and transportation management and that future implementation-level decisions will be made through individual TMPs for each TMA. Text relating to interim management and implementation-level decisions from Chapter 2 of the Proposed RMP/Final EIS is incorporated under the header

"Compliance with ANILCA" in this ROD and Approved RMP **Section 2.4.5**, Travel and Transportation Management, where the process for compliance with ANILCA under the RMP is outlined.

- Appendix J of the Proposed RMP/Final EIS incorrectly listed Accomplishment Creek with allocations for the stream order-based 100-year floodplain buffer. **Section 2.5.1**, Areas of Critical Environmental Concern, correctly lists those allocations as for the entire ACEC.
- While finalizing the data for the ROD and Approved RMP, the BLM identified approximately 63,000 acres of BLM-managed land encumbered by ANCSA 17(d)(1) withdrawals that were not included within the BLM-managed lands identified in the Proposed RMP/Final EIS. This area is less than 0.4 percent of the total amount of BLM-managed lands in the planning area. This minor difference in acreage for BLM-managed lands withdrawn under ANCSA 17(d)(1) would not have changed the analysis. The maps in **Appendix A** of this ROD and Approved RMP have been corrected and all BLM-managed lands in the Central Yukon Planning Area are appropriately identified.
- **Appendix A**, Maps, references to Revised Statute 2477 routes have been removed from the maps after errors were found in the depiction of some routes. Identifying routes as Revised Statute 2477 routes was not necessary for the purposes of planning-level travel management decisions. Existing routes within the planning area will be shown as either a road or trail.
- **Appendix D**, ANILCA Access, of the Approved RMP provides guidance on implementing Sections 811, 1110(a), and 1323(b) of ANILCA (16 U.S.C. 3101 et seq.). The Approved RMP makes no decisions that change how inholdings will be accessed.
- In **Appendix J**, the Brooks Range RMZ designation was removed from the Dalton Highway Corridor SRMA because the RMZ designation fully overlaps with the SRMA and does not identify specific lands within the SRMA for distinct management. The area was renamed the Brooks Range North SRMA. The recreation setting characteristics under this SRMA were corrected to be as described in the Brooks Range North/Galbraith Lake RMZ in the Proposed RMP/Final EIS Alternative E.
- Also in **Appendix J**, the Central Dalton SRMA was corrected to include the Coldfoot RMZ and Yukon River Crossing RMZ as described under Alternative B in **Appendix K** of the Proposed RMP/Final EIS, which was erroneously left out of the description in Alternative E. This does not change the impact analysis for this SRMA. **Table M-1** in **Appendix M**, Areas of Critical Environmental Concern, has been expanded to include the number and acreage of potential ACECs partially designated under the Approved RMP.
- **Appendix M** has been clarified by adding text about BLM Instruction Memorandum (IM) 2023-013, Clarification and Interim Guidance for Consideration of Areas of Critical Environmental Concern Designations in Resource Management Plans and Amendments.
- The relevant and important values for Galbraith Lake, Jim River, Snowden Mountain, Sukakpak Mountain, and Sukakpak Mountain/Snowden Mountain potential ACECs were corrected in **Table M-2** in **Appendix M**. Galbraith Lake ACEC's relevant and important values include wildlife and cultural; and Jim River ACEC's relevant and important values include fish and riparian. Snowden Mountain's, Sukakpak Mountain's, and Sukakpak Mountain/Snowden Mountain's potential ACECs all have a relevant and important value of wildlife and do not have a relevant and

important value of fish/riparian. Snowden Mountain ACEC has a relevant and important value of soils.

1.5 Management Considerations and Decision Rationale

The Approved RMP is a reflection of statutory, regulatory, and national policy considerations (**Appendix C**, Relationship to BLM Policies, Plans, and Programs). Management decisions are based on review and substantive comments from federal agencies, tribal entities, Alaska Native corporations, State and local governments and agencies, the public, industry, and the cooperating agencies that participated in the planning process.

The Approved RMP provides the best combination of management decisions to meet the purpose of and need for the RMP in consideration of the planning issues and management concerns identified through the planning process. It fulfills the purpose by (1) providing goals and objectives for public lands management, and by (2) resolving multiple-use conflicts or issues associated with those requirements. It fulfills the need by addressing current resource conditions, changes in circumstances (such as evolving demands on resources), and new or revised national-level policies (43 CFR 1610.5-6) since preparation of the Utility Corridor RMP (BLM 1991), the Central Yukon RMP (BLM 1986a), the SWMFP (BLM 1981), and subsequent amendments. Analysis of the alternatives in the Central Yukon Proposed RMP/Final EIS considered a reasonable range of potential management allocations. Allocations such as ACEC designations, ROW avoidance or exclusion areas, and restrictions on mineral development are limited to the areas where analysis indicates this management is necessary to support the BLM's mission, including multiple use and sustained yield mandates.

In compliance with IM 2023-13, the BLM has evaluated whether relevant values in the ACECs designated under the Approved RMP contribute to landscape intactness, climate resiliency, habitat connectivity, or opportunities for conservation or restoration, or have substantial significance to Tribes or Alaska Native Corporations, as defined in ANILCA, in a way that may support Tribal co-stewardship or traditional and customary uses. In **Appendix M**, Areas of Critical Environmental Concern, the BLM evaluates the need for special management attention to protect the relevant and important values identified for each proposed ACEC, and where special management is not necessary **Appendix M** addresses how other management otherwise protects the relevant and important values.

Compared to the other action alternatives, the Approved RMP provides the most comprehensive framework for addressing the diverse management needs of BLM-managed lands in the planning area. It recognizes the important cultural link between Tribes and the planning area and seeks to protect lands in this area for values important to the Tribes. In doing so, BLM land use planning in Alaska also takes into account ANILCA. For example, BLM ensures that structures or shelters that are used in conjunction with hunting, trapping, and fishing would be consistent with ANILCA Sections 1316 and 1303(b)(1), and implementing ANILCA Sections 811 and 1110(a), which provide specific guidance on access for subsistence and traditional activities. In addition, ANILCA Title VIII establishes a priority for the customary and traditional uses of these subsistence resources by rural Alaskan residents on federal public lands. The law provides the opportunity for rural Alaska residents to continue to engage in a subsistence way of life. The Alaska Supreme Court found that the State of Alaska cannot provide the same preference to rural residents pursuant to the Alaska Constitution in *McDowell v. State*, 785 P.2d 1 (Alaska 1989), under its regulatory authority.

1.5.1 ANILCA Section 810

Section 810(a) of ANILCA requires that a subsistence evaluation be completed in the RMP. ANILCA requires that this evaluation include findings on three specific issues in determining whether the RMP would significantly restrict subsistence uses:

1. The effect of such use, occupancy, or disposition on subsistence uses and needs
2. The availability of other lands for the purpose sought to be achieved
3. Other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes

The following discussion summarizes the ANILCA Section 810 evaluation for the decision in this ROD (see also **Appendix L**, ANILCA Section 810 Final Evaluation). **Appendix L** draws on the detailed analysis contained in Chapter 3 and the appendixes of the Proposed RMP/Final EIS, particularly subsistence use and resources (Proposed RMP/Final EIS Appendix Q), the ANILCA Section 810 final evaluation (Proposed RMP/Final EIS Appendix R), and social and economic conditions (Proposed RMP/Final EIS Appendix S); these are incorporated by reference here. The analysis contained in the Proposed RMP/Final EIS disclosed potential impacts on subsistence use and resources from the range of management actions proposed, as well as from cumulative effects. Cumulative effects are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR 1508.7). The cumulative effects analysis of the ANILCA Section 810 evaluation is referred to as the "cumulative case."

810 Findings

Based on the ANILCA Section 810 final evaluation (**Appendix L**), the Approved RMP will not result in a significant restriction in subsistence uses and will not have a disproportionate negative impact on environmental justice communities. The Approved RMP does not contain the actions, including the recommended revocation of PLO 5150, which were found in the other action alternatives to cause significant restriction in subsistence uses.

Management actions analyzed as having the most potential to significantly restrict abundance, availability, or access of subsistence resources under the Approved RMP are:

- Areas open to locatable mineral development and mineral materials sales in known subsistence use areas
- Areas designated as open to ROW location in known subsistence use areas
- Partial revocations of land withdrawals related to ANCSA PLOs to allow for selection of allotments by Native Alaska Vietnam-era veterans
- Areas designated as the Dalton Corridor Backcountry Conservation Area (BCA) in known subsistence use areas
- Areas with seasonal OHV restrictions targeting summer months in known subsistence use areas

The BLM has determined that, after consideration of all alternatives, subsistence evaluations, and public hearings, such a significant restriction of subsistence uses as could occur under the cumulative case is necessary and consistent with sound management principles for the utilization of this land, and that the

Approved RMP will involve the minimal amount of public lands necessary to accomplish the RMP's purpose. Reasonable steps, including consideration of the best available information and input gathered during public involvement (**Section 1.9**) in formulating management under the Approved RMP, have been taken to minimize the adverse impacts on subsistence uses and resources arising from this action. This resulted in management such as the SOPs in Appendix E and the designation of ACECs to protect crucial habitat and resources necessary for subsistence practices. The cumulative case, when taken in conjunction with the Approved RMP, accounts for the potential for significant mineral development on State and private lands as well as access to those mineral areas. It would not significantly restrict subsistence uses or have a disproportionate negative impact on the communities of Arctic Village, Galena, Hughes, Huslia, Kaltag, Koyukuk, Lake Minchumina, Manley Hot Springs, Minto, Nenana, Nuiqsut, Nulato, Rampart, Ruby, Stevens Village, Tanana, and Venetie. The development of known deposits in the Ambler Mining District, Wiseman East and West deposits, and the Ray Mountains could significantly restrict subsistence uses and have a disproportionate negative impact on the environmental justice communities of Alatna, Allakaket, Anaktuvuk Pass, Evansville, Hughes, and Huslia; this development could also significantly restrict subsistence uses for the communities of Bettles, Coldfoot and Wiseman (see **Appendix L**).

Notice and Hearings

ANILCA Section 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy, or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Section 810(a)(1) and (2). In the Draft RMP/EIS, the BLM made positive findings pursuant to ANILCA Section 810 that Alternatives B, C1, C2, and D, and the cumulative case presented in the Draft RMP/EIS, met the "may significantly restrict" threshold. Therefore, the BLM conducted the notice and hearing procedures required by ANILCA Section 810 (a)(1) and (2) in conjunction with the release of the Draft RMP/EIS to solicit public comments from the potentially affected communities. Public hearings were held virtually via Zoom on January 28, February 4, and February 9, 2021. The hearings provided an opportunity for testimony to residents of the potentially affected communities of Alatna, Allakaket, Anaktuvuk Pass, Bettles, Coldfoot, Evansville, and Wiseman, as well as other communities throughout the planning area. Notices of these hearings were provided in the *Federal Register*.

Rural residents that participated in the hearings talked about the degree to which they depend on resources in the region and emphasized the importance of working with federally recognized Tribes. They described the current status of game populations and expressed the need for their communities to have access to safe and reliable food sources. Residents voiced concerns that resource development could contaminate rivers and impact subsistence fish resources. Participants expressed concern regarding the virtual format of the public meetings and hearings and the time allotted for speaking. Multiple participants voiced opposition to the recommendation to lift PLO 5150 under the plan and opposed alternatives that included this recommendation. They described the impact that this recommendation would have on their ability to access traditional hunting, fishing, and gathering areas. They provided detailed examples of how changes in legal access to traditional lands would impact their subsistence practices. Much of this discussion and testimony during the hearings confirmed the impacts documented in the Draft RMP/EIS.

Feedback received during the ANILCA 810 hearings, along with consideration of public comments and further consideration of impacts on environmental justice communities documented in the Proposed RMP/Final EIS, Section 3.5.1, led to modifications of findings for some alternatives to more accurately depict impacts from the RMP alternatives in the analysis and to the changes in Alternative E, including the removal of the recommendations to revoke PLO 5150 and reduce the revocation of the 17(d)(1) withdrawals only to allow for the selection of Native allotments pursuant to the Dingell Act.

Final Determinations

ANILCA Section 810(a)(3) requires three determinations. The three determinations that must be made are the following:

1. that such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands.
2. that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition; and
3. that reasonable steps will be taken to minimize adverse impacts on subsistence uses and resources resulting from such actions[5]

In the ANILCA Section 810 Final Evaluation (**Appendix L** of the Approved RMP), the BLM finds that management under the Approved RMP will not significantly restrict subsistence uses. The Approved RMP, however, in conjunction with the cumulative case, could significantly restrict subsistence uses and could have a disproportionate and negative effect on the environmental justice communities of Alatna, Allakaket, Anaktuvuk Pass, and Evansville. It could also significantly restrict subsistence uses for the communities of Bettles, Coldfoot, and Wiseman.

The determinations below satisfy the requirements of ANILCA Section 810(a)(3)(A), (B), and (C).

1. *Significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of public lands.*

Alternative E is the only alternative that would not result in significant restriction (of the non-cumulative case) of subsistence use because it does not recommend that the Secretary revoke the ANCSA 17(d)(1) withdrawals or PLO 5150. The State currently has over 12.6 million acres of selected lands, including approximately 5.2 million acres within the Central Yukon Planning Area, from which it can receive its approximately 5.2 million acres of remaining entitlement. As such, revoking the withdrawals is not necessary to meet the State's Statehood Act land entitlement. Further, the BLM determined in the Final EIS that PLO 5150 and the ANCSA 17(d)(1) withdrawals continue to serve a purpose for which they were established. The BLM stands ready to convey the remaining acres of entitlement as soon as the State requests the conveyance of lands from its selections. See **Section 1.5.3**, ANCSA 17(d)(1)s and PLO 5150.

As defined by FLPMA, as amended, public lands are those federally owned lands and interest in lands (for example, federally owned mineral estate) that are administered by the Secretary of the Interior, specifically through the BLM. These include lands selected, but not yet conveyed, to the State of Alaska and Native corporations and villages.

The Approved RMP will meet BLM statutory requirements for a land use plan as mandated by Section 202 of FLPMA, which specifies the need for comprehensive land use plans consistent with multiple-use and sustained-yield objectives. The Final EIS has fulfilled NEPA requirements to disclose and address environmental impacts of proposed major federal actions through a process that includes public participation and cooperation with other agencies.

---

[5] (16 U.S.C. 3120(a)(3)(A), (B), and (C))

After considering a broad range of alternatives, the BLM developed the Approved RMP to fulfill the BLM's multiple-use mission. Through the approval of this Approved RMP, the BLM proposes to provide a comprehensive land use plan that will guide management of the public lands and interests administered by the CYFO.

The BLM has determined that no significant restriction on subsistence use will occur under the Approved RMP. When considered together with all the possible impacts of the cumulative case, any restriction on subsistence use is consistent with the sound management principles for the use of these public lands and is necessary for the BLM to fulfill the management goals for the planning area as guided by the statutory directives in FLPMA and other applicable laws.

2. *The proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition.*

The BLM has determined that the Approved RMP involves the minimal amount of public lands necessary to accomplish the proposed action's purpose, which is the creation of an inclusive, comprehensive plan that provides clear direction to both the BLM and the public on how BLM-managed lands and resources in the planning area should be managed.

3. *Reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.*

When the BLM began its NEPA scoping process for the RMP, it internally identified subsistence use as one of the major issues to be addressed based on scoping comments, consultation, and input from public meetings. This was reinforced by comments received on the Draft RMP/EIS. The results of public scoping meetings, consultation with tribal governments, and meetings and correspondence with local governments were used to craft the Approved RMP. In addition, the BLM took into consideration comments from rural villages and individuals during the ANILCA 810 subsistence hearings. This information contributed to the development of Alternative E, which would retain PLO 5150, and under which the lands would not become effective State selections that would likely be conveyed out of federal ownership and would maintain subsistence users' legal access to important resources. Alternative E was adopted as the Proposed Plan in the Final EIS and was recognized as containing management actions that would minimize impacts on subsistence use.

Given these steps, the BLM has determined that the Approved RMP includes reasonable steps to minimize adverse impacts on subsistence uses and resources that may result from the RMP.

The BLM has determined that, after consideration of all alternatives, subsistence evaluations, and public hearings, such a significant restriction of subsistence uses as may occur under the cumulative case is necessary and consistent with sound management principles for the utilization of this land, and that the Approved RMP will involve the minimal amount of public lands necessary to accomplish the RMP's purpose. Reasonable steps have been taken to minimize the adverse impacts on subsistence uses and resources arising from this action.

1.5.2 Designation of Areas of Critical Environmental Concern

The designation of ACECs under the Approved RMP is consistent with FLPMA and BLM guidance. While FLPMA Section 202(c)(3) directs the BLM to “give priority to the designation and protection of areas of critical environmental concern” during the development and revision of land use plans (43 U.S.C. 1712(c)(3)), the agency is not required to designate all proposed ACECs even if relevant and important values are present (BLM Manual Section 1613.23). The BLM complied with agency policy that requires all ACECs with relevant and important values be considered for designation in at least one alternative (BLM Manual Section 1613.22.B).

The Proposed RMP/Final EIS considered a range of ACEC designation options across alternatives, including Alternative B that recommended designating all potential ACECs. The Proposed RMP/Final EIS also provided a comparison of the effects and trade-offs associated with each alternative (Proposed RMP/Final EIS Appendix T). Consistent with the BLM ACEC Manual Section 1613.33.E, the Proposed RMP/Final EIS documents that for each potential, but not designated, ACEC, the standard or routine management prescriptions in the Approved RMP are sufficient and special management attention is not required to protect the relevant and important values from risks or threats of damage or degradation.

For the potential ACECs not designated or partially designated under the Approved RMP, routine management—such as hot springs withdrawals, ROW avoidance areas, or caribou core range protections—will prevent impacts on the relevant and important values. For example, visual resource management (VRM) Class II objectives will reduce impacts on the relevant and important values of geological features and scenic values for the undesignated potential portion of the Sukakpak/Snowden Mountain ACEC. Other potential ACECs are difficult to access due to the area’s geography, so the potential for development or other disturbances is low; in combination with routine management, impacts on relevant and important values will be avoided. Some current RNAs would be undesignated in part because no known research has been conducted in them for more than 20 years.

Any potential projects would include mitigation measures (**Appendix E**) to protect relevant and important values. The Approved RMP provides protection to relevant and important values where it is most needed and where threats are the highest. This is within the discretion afforded to the BLM under FLPMA and agency guidance to determine whether not designation of ACECs is appropriate in a land use plan.

1.5.3 ANCSA 17(d)(1)s and PLO 5150

The Approved RMP does not recommend that the Secretary revoke PLO 5150 nor does it recommend full revocation of the ANCSA 17(d)(1) withdrawals. The Proposed RMP/Final EIS’s analysis found that significant environmental and subsistence impacts were likely if these withdrawals were fully revoked. The Approved RMP does recommend a partial revocation of the ANCSA 17(d)(1) withdrawals for the limited purpose of allowing for the selection of Native allotments pursuant to the Dingell Act.

If the ANCSA 17(d)(1)s were revoked through secretarial action, all top-filings which become effective State selections would be segregated and unavailable to mineral entry and leasing. Areas that are State selected Priority 1 and 2 top-filings would be conveyed to the State within 10 years and would change from BLM management to State management. The State would determine how these lands are managed. These lands would likely become open to mineral entry and mineral leasing, as well as other land uses not allowed under current federal management. After conveyance, the State lands would be open to mineral development that would likely result in impacts on surface resources.

Also, this conveyance could affect the ability of the public to access public and private lands by crossing the conveyed lands. Once conveyed, the BLM cannot guarantee that an area will be open to subsistence use or that access across the land to other federally managed land will be allowed. This is true even of conveyances to the State of Alaska. For example, Alaska Statute § 19.40.210 does not allow the use of OHVs within 5 miles of the Dalton Highway. Therefore, the conveyance of Priority 1 and 2 selections within 5 miles of the Dalton Highway would restrict public access, including the access for federally qualified subsistence users to public lands.

Revocation of the withdrawals would have an immediate impact of reducing the lands open to federal subsistence priority where the State has top-filed selections. A top-filed selection becomes an effective State selection only when the Secretary of the Interior revokes in part or in full a PLO to allow for the top-filing to become effective and the land becomes available for selection. Once the land is subject to an effective State selection, the lands are no longer considered public lands for the purposes of federally qualified subsistence. Once conveyed, this loss of land subject to federal subsistence priority would become permanent as ANILCA's rural preference cannot be offered under State law following McDowell v. State, 785 P.2d 1 (Alaska 1989). If PLO 5150 were revoked through secretarial action, its revocation would have the practical effect of removing the federal subsistence priority from the subsistence use areas of the residents of Coldfoot and Wiseman.

Due to the environmental impacts described in the Proposed RMP/Final EIS and summarized above, the Approved RMP only proposes to revoke the ANCSA 17(d)(1) withdrawals outside of the PLO 5150 corridor to allow for the selection of Native allotments in compliance with the Dingell Act. While this would result in land conveyance out of federal administration, it would not occur on a scale likely to cause a significant restriction in federally qualified subsistence uses.

This recommendation does not follow the recommendations made in the 2006 Report to Congress, Sec. 207 Alaska Land Transfer Acceleration Act: A Review of D-1 Withdrawals (BLM 2006), made in response to Section 207 of the Alaska Land Transfer Acceleration Act. The positions expressed in that report and those planning recommendations are not binding on my decision. The BLM's recommendations and the prior Secretary's withdrawal revocation orders were based on an unnecessarily narrow interpretation of ANCSA 17(d)(1). The BLM previously stated in the BLM 2006 Report that the purpose of the ANCSA 17(d)(1) withdrawals was to temporarily maintain the status quo until the BLM could complete land use planning (i.e., prepare RMPs). But this interpretation fails to account for the broad underlying purpose of the withdrawals authorized under ANCSA 17(d)(1): "to [e]nsure that the public interest in these lands is properly protected" (43 U.S.C. § 1616(d)(1)). ANCSA grants the Secretary ongoing authority to "classify or reclassify" any lands withdrawn following enactment of ANCSA 17(d)(1) to protect the public interest. This Secretarial authority is distinct from the BLM's land use planning authority under FLPMA. Under ANCSA 17(d)(1), withdrawals may be left in place after land use planning is complete if they are necessary to protect the public interest in these lands. This recommendation finds that the public interest in the rural resident preference rights for subsistence under Title VIII of ANILCA, protection of Dall Sheep and its habitat, protection of relevant and important ACEC values, and protection of the known and unknown cultural and historical resources in the planning area.

The protection of that public interest in the important resource values described herein requires that the withdrawals remain in place.

1.6 Application of the Approved RMP to Existing Projects, including Renewals and Extensions

Because of the long history of public land management, there are numerous rights and privileges that have been established on BLM-managed lands under law, regulation, or planning decisions. The decisions included in this ROD and Approved RMP supersede the Utility Corridor RMP (BLM 1991), the Central Yukon RMP (BLM 1986a), the SWMFP (BLM 1981), and their subsequent amendments. This Approved RMP provides planning-level guidance for the management of resources and designation of uses on all BLM-managed public lands within the planning area and any BLM-managed subsurface estate. Nothing in this plan will impact ANCSA or Alaska Statehood Act land conveyances for lands that are currently segregated by a State and/or ANCSA selection. Partial revocation of ANCSA 17(d)(1) withdrawals recommended under the Approved RMP will make lands that are vacant, unappropriated, and unreserved available for selection by qualified Alaska Native Vietnam-era veterans under Section 1119 of the Dingell Act. Lands covered by the Approved RMP include the following:

- BLM-unencumbered lands
- BLM State-selected lands
- BLM ANCSA Native corporation-selected lands
- Dual-selected lands
- BLM-administered mineral estate

Lands selected by ANCSA corporations and the State of Alaska will remain segregated (unavailable) to locatable mineral entry.

Other lands within the planning area not covered by the Approved RMP include the following:

- State of Alaska lands
- USFWS lands
- Alaska Native lands patented or interim conveyed
- Department of Defense, Air Force, Army, and Army Corps of Engineers lands
- Private lands
- Alaska Native allotments
- Local government lands
- Navigable waters
- Other federal lands
- Certain prior existing mining claims: Any prior existing mining claims administered by the BLM within USFWS lands are not covered by the Approved RMP.

The ROD and Approved RMP do not authorize any project, approve any application, or provide approval for any specific future action within the planning area. All future applications, with the exception of the selection and conveyance of Native allotments under the Dingell Act if the Secretary acts on the recommendation to revoke in part the ANCSA 17(d)(1) withdrawals, will be subject to an environmental analysis process, which will include an opportunity for public review, identification of potential impacts resulting from the proposed action, development and application of mitigating measures, and assignment of the BMPs and SOPs in **Appendix E**, as appropriate.

In addition, many decisions are not appropriate at this level of planning and are not included in the ROD and Approved RMP. Examples of these types of decisions include:

- Statutory requirements
- National policy
- Funding levels and budget allocations

All BLM-managed lands and federal mineral estate within the planning area remain subject to valid existing rights[6] as well as subject to the stipulations and conditions of approval associated with the given right at the time it was granted, including the right of reasonable access to surface and subsurface parcels leased for the development of the mineral interest. Resource-related requirements in the Approved RMP would be applied to all new authorizations that are reissued. On existing authorizations, the BLM would seek voluntary compliance or would develop conditions of approval for applications for new projects, consistent with valid existing rights, to achieve objectives of resource-related requirements contained in Proposed RMP/Final EIS.

After the RMP is approved, any authorizations and management actions approved based on an activity-level or project-specific EIS or environmental assessment must conform to the Approved RMP; it must be specifically provided for in the RMP or be otherwise consistent with the terms, conditions, and decisions in the Approved RMP (43 CFR 1601.0-5(b)). A land use plan amendment may be necessary to consider monitoring and evaluation findings, substantive new data, new or revised policy, or changes in circumstances, or for a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the Approved RMP. If the BLM determines that a plan amendment may be necessary, preparation of an EIS or environmental assessment and the analysis necessary for the amendment may occur simultaneously (43 CFR 1610.5).

Projects that require a decision to extend an authorization may require modification to conform to the RMP before approval, including renewals or extensions of existing authorizations, such as ROW grant renewals. Projects for which site-specific decisions have not yet been signed, but for which preparation of NEPA documents began prior to the ROD's effective date, may also require modification to conform to the RMP. Projects for which site-specific decisions were signed prior to the ROD's effective date, but that have not yet been implemented, may also require modification to conform to the RMP.

1.7 Mitigation Measures

The BLM will apply mitigation measures to BLM-authorized activities within the planning area to achieve land use plan goals and objectives while continuing to honor the BLM's multiple-use mission.

---

[6] A valid existing right is "a third-party (i.e., nonfederal) interest in federal land that the relevant federal agency cannot terminate or unduly limit." See the January 15, 2021, Congressional Research Service Report "Withdrawal of Federal Lands: Analysis of a Common Legislated Withdrawal Provision". Internet website: https://crsreports.congress.gov/product/pdf/R/R46657.

The Approved RMP includes the following mitigation management actions:

- Adaptive management, including options for shifts in mitigation strategy and intensity based on monitoring results (**Appendix F**). This will proactively manage for the sustained yield through landscape resilience, connectivity, and adaptability. This is to support multiple-use activities, while maintaining functional landscapes.
- Proactive prioritization of survey and monitoring of resources and resource areas that could be evolving due to climate change and implementation of mitigation to address those impacts.
- Increased collaboration and coordination with other agencies and landowners to provide for landscape-level management and coordinated monitoring and mitigation efforts at an appropriate scale for impacts.
- Management to maintain or improve resource and resource use conditions related to subsistence.

SOPs and fluid mineral leasing stipulations of the Approved RMP (**Appendix E**) list the SOPs applicable to land use activities authorized on BLM-managed lands in the planning area. The SOPs are based on the standards and guidelines in the Alaska Statewide Land Health Standards (IM AK 2004-023) as well as the goals outlined in the Approved RMP.

The SOPs are requirements, procedures, management practices, and design features that the BLM will use to avoid, minimize, reduce, or rectify adverse environmental or social impacts of land use activities. Leasing stipulations are requirements to reduce impacts on natural resources from fluid mineral exploration and development. The SOPs and leasing stipulations generally do not restate existing requirements in regulations or laws, including state laws. Regulations or laws may require conditions that are more stringent than those presented in **Appendix E**.

The SOPs included in **Appendix E** are not intended to be a complete list; rather, they provide examples of commonly used practices the CYFO may require to reduce the impacts of surface-disturbing activities, use, or occupancy. More explicit SOPs based on local conditions and resource-specific concerns may be developed once a specific proposal is evaluated through the environmental analysis process. Additional BMPs can be recommended by proponents of proposed activities on BLM-managed lands.

Mitigation measures such as SOPs may be attached to land use authorizations as stipulations or terms and conditions to avoid, minimize, reduce, or rectify adverse environmental or social impacts of land use activities.

1.8 Plan Monitoring

The BLM will monitor the Approved RMP's implementation and evaluate the need for revisions or amendments every 5 years at a minimum, per the BLM's Land Use Planning Handbook (BLM 2005). RMP evaluations will also be completed prior to any plan revisions and for major RMP amendments. Revisions to the Approved RMP will be required to comply with FLPMA planning guidelines, as well as the environmental review requirements in NEPA.

Monitoring of the land use plan decisions is a continuous process occurring over the life of the RMP. The aim is to maintain a dynamic RMP. Monitoring data are collected, examined, and used to draw conclusions about:

- whether planned actions have been implemented in the manner prescribed by the RMP (implementation monitoring), and
- whether RMP allowable use and management action decisions and the resultant implementation actions are effective in achieving program-specific objectives or desired outcomes (effectiveness monitoring).

The BLM uses conclusions drawn from monitoring to make recommendations on whether to continue current management or identify changes that need to be made to implementation practices to better achieve RMP goals. Indicators, methods, locations, units of measure, frequency, and action triggers can be established by national policy guidance, in RMPs, or by technical specialists to address specific issues.

Based on staffing and funding levels, monitoring is annually prioritized consistent with the goals and objectives of the RMP. The BLM may work in cooperation with local, State, and other federal agencies, or it may use data collected by other agencies and sources when appropriate and available.

1.9 Public Involvement

The BLM follows the land use planning public involvement requirements documented in the CEQ's regulations implementing NEPA (40 CFR 1501.7 for scoping and 1506.6 for public involvement) and the BLM planning regulations (43 CFR 1601–1610). The RMP planning process began with the *Federal Register* publication of the BLM's Notice of Intent to develop an RMP/EIS on June 14, 2013. Although the BLM makes the planning decision, it recognizes the importance of involving Tribes, cooperating agencies, and the interested public in the evaluation of alternatives, as discussed in the BLM's Land Use Planning Handbook, H-1601-1 (BLM 2005).

1.9.1 Public Scoping

The formal public scoping process for the RMP revision began with the publication of the Notice of Intent in the *Federal Register* on June 14, 2013. The BLM also posted the Notice of Intent on the project website (https://eplanning.blm.gov/eplanning-ui/project/35315/510), thereby notifying the public of its intent to revise the RMP. The Notice of Intent provided background information on the RMP planning area, applicable documents and reports, a project timeline, information about the planning process, meeting information, news releases, contact information, and other resources. The BLM also notified the public of the scoping process via a postcard mailing and email to mailing list recipients and parties with a known interest, a newsletter, news releases, and public service announcements.

The BLM held 16 public meetings in 15 different communities during the scoping period. Meetings generally consisted of a short open house, followed by a presentation and then public testimony. A total of 291 people signed in at the meetings. Besides the scoping meetings, approximately 70 individuals, agencies, and organizations provided written comments. An additional 2,900 form letters were submitted via email as of January 28, 2014. The BLM received additional comments and nominations for ACECs between July and early September 2014. Detailed information about the comments received and about the public outreach process can be found in the scoping report for the RMP, which was finalized in March 2015 (BLM 2015); this report can be found at https://eplanning.blm.gov/eplanning-ui/project/35315/510.

1.9.2 Preliminary Alternatives Outreach

In the winter of 2017, the BLM invited landowners, stakeholders, and the public to meetings to discuss the Draft RMP/EIS. Ten meetings were held in communities across Interior Alaska and in the cities of Fairbanks and Anchorage. Attendees were encouraged to submit comments via a comment form or after the meeting via mail or email. Comments were accepted from January 17 through March 31, 2017. The BLM received 1,164 comments and then used them to inform the development of the alternatives of the Draft RMP/EIS.

1.9.3 Issues Considered

The BLM identified the following 13 preliminary planning issues for management:

1. Management of access and comprehensive travel,
2. Climate change,
3. Fish and aquatic species habitat management,
4. Invasive and nonnative species,
5. ANCSA withdrawals,
6. Utility corridor withdrawal,
7. Management of mining,
8. Management of sand and gravel,
9. Management of recreation and visitor services,
10. Subsistence,
11. Management of wildlife habitat,
12. Water quality, wetlands, and riparian habitat management, and
13. Wilderness characteristics.

Through internal scoping, the BLM generated questions related to these primary issue areas. More detailed information on each planning issue is included in the scoping report for the RMP (BLM 2015).

1.9.4 Public Review of and Comment on the Draft RMP/EIS

A Notice of Availability announcing the release of the Draft RMP/EIS was published in the *Federal Register* on December 11, 2020, initiating the 90-day public comment period. The BLM extended the public comment period an additional 90 days until June 9, 2021.

The BLM engaged in a collaborative outreach and public involvement process during the public comment period that included federally recognized Tribes; Alaska Native corporations; city, State, and federal agencies; nongovernmental organizations; and the public. The intent of the comment period was to provide the public with an opportunity to review the Draft RMP/EIS and provide feedback on the analysis. The BLM collected comments on alternatives, objectives, and actions described in the Draft RMP/EIS. The Proposed RMP/Final EIS reflected changes or adjustments based on information received during public comment, new information, or changes in BLM policies or priorities.

Due to the COVID-19 pandemic, the BLM held seven virtual public meetings instead of in-person public meetings to prioritize the health and safety of participants during the public involvement period for the Draft RMP/EIS. BLM staff at each meeting shared a presentation on the Draft RMP/EIS, held an ANILCA Section 810 subsistence hearing, answered questions, and helped the public submit written or oral comments. To capture all relevant comments, court reporters were made available in all meeting locations for attendees to provide verbal testimony, if they desired. A list of the meetings and meeting dates is provided below.

1. January 26, 2021: General public meeting
2. January 27, 2021: General public meeting
3. January 28, 2021: This meeting prioritized soliciting comments and an ANILCA Section 810 hearing from the following communities: Coldfoot, Wiseman, Bettles, Evansville, Anaktuvuk Pass, Alatna, and Allakaket.
4. February 2, 2021: This meeting prioritized soliciting comments and an ANILCA Section 810 hearing from the following communities: Coldfoot, Wiseman, Bettles, Evansville, Anaktuvuk Pass, Alatna, and Allakaket.
5. February 3, 2021: This meeting prioritized soliciting comments from the following communities: Nulato, Koyukuk, Ruby, and Galena/Louden Village.
6. February 4, 2021: This meeting prioritized soliciting comments from the following communities: Tanana, Rampart, Stevens Village, and Venetie/Arctic Village.
7. February 9, 2021: This meeting prioritized soliciting comments and an ANILCA 810 subsistence hearing for the following communities: Coldfoot, Wiseman, Bettles, Evansville, Anaktuvuk Pass, Alatna, and Allakaket.

In addition to virtual public meetings, the BLM launched an RMP project website at https://eplanning.blm.gov/eplanning-ui/project/35315/510. An online open house format was used to post materials during the Draft RMP/EIS public comment period, including meeting times, reports, maps, geographic information system shapefiles, meeting summaries, comment forms, postcards, newsletters, information updates, and the comment period deadline. The same materials that would be provided by the BLM at in-person community meetings were made available online. Meeting and issue summaries from scoping remain on the RMP project website to provide connections to earlier outreach efforts in the planning process.

During the Draft RMP/EIS comment period, the BLM received 40,324 comment letter submissions; 181 of these were considered unique submissions and 40,143 were part of form letter campaigns. Many comments received throughout the comment analysis process expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft RMP/EIS, or represented commentary on management actions that are outside the scope of the EIS. These commenters did not provide specific information to assist the BLM in making a change to the existing action alternatives, did not suggest new alternatives, and did not take issue with methods used in the Draft RMP/EIS; therefore, the BLM did not address these comments further in the response to comments in the Proposed RMP/Final EIS.

However, the BLM read, analyzed, and considered all comments of a personal or philosophical nature and all opinions, feelings, and preferences for one element or one alternative over another. It is important to note that, while the BLM reviewed and considered all comments, none were counted as votes. The NEPA public comment period is neither an election nor does it result in a representative sampling of the population. Therefore, public comments are not appropriate to be used as a democratic decision-making tool or as a scientific sampling mechanism.

Subject matter experts reviewed comments that recommended additional studies, data, or scientific literature to be incorporated into the analysis; new information and citations were incorporated into the Final EIS as appropriate. Comments citing editorial changes to the document were reviewed and incorporated (Proposed RMP/Final EIS Appendix U). The Final EIS was technically edited and revised to fix typos, missing references, definitions, and acronyms; it also provides other clarifications as needed.

1.9.5 Protest of the Proposed RMP/Final EIS

The BLM prepared an EIS for the Proposed RMP, in compliance with NEPA. The Approved RMP is similar to Alternative E in the Proposed RMP/Final EIS, published April 26, 2024 (BLM 2024).

The public was invited to submit protests on the Proposed RMP/Final EIS. The protest period was 30 days, from April 26 to May 28, 2024. The BLM received eight unique protest letters, listed below in **Table 1-2**.

Table 1-2, Protesters and BLM's Determinations on those Protests

Letter #	Protester	Organization	Determination
1	Aaron Schutt	Doyon, Limited	Denied
2	Jeff Keener	Not applicable	Dismissed—no standing
3	Russ Vanderlugt	Not applicable	Denied
4	Mark Richards	Resident Hunters of Alaska	Denied
5	Randy Ruaro	Alaska Industrial Development and Export Authority	Dismissed—no standing
6	Deantha Skibinski	Alaska Miners Association	Denied
7	David Knutson	Arctic Slope Regional Corporation	Denied
8	Treg Taylor	State of Alaska	Denied

The planning regulations at 43 CFR 1610.5-2 outline the requirements for filing a valid protest. Resolution of protests is delegated to the BLM Assistant Director for Resources and Planning whose decision on the protest is the final decision of the U.S. Department of the Interior (43 CFR 1610.5-2(b)) consistent with the BLM Delegation of Authority Manual (MS-1203 Delegation of Authority). The BLM evaluated all protest letters to determine which protest letters were complete and timely, and which persons have standing to protest. Two letters were complete and timely but were dismissed because the people who submitted the letters did not have standing to protest. The remaining six letters were complete and timely and were from parties who had standing to protest. Six of these letters contained valid protest issues. The BLM documented the responses to the valid protest issues in a protest resolution report.

After careful review of the report by the BLM's Assistant Director for Resources and Planning, the Assistant Director concluded that the BLM Alaska State Director followed the applicable laws, regulations, and policies and considered all relevant resource information and public input. The Assistant Director addressed the protests and issued a Protest Resolution Report to protesting parties and posted the report on the BLM's website. Protests were resolved without making significant changes to the Proposed RMP, though minor clarifications were made and are explained in **Section 1.4**, Clarifications and Modifications since the Proposed RMP. The decision was sent to the protesting parties by certified mail, return receipt requested.

1.9.6 Governor's Consistency Review

Concurrent with the protest period, the BLM made the Proposed RMP/Final EIS available to the Governor of Alaska for a 60-day consistency review as required by 43 CFR 1610.3-2(e). The BLM's planning regulations require that RMPs be "consistent with officially approved or adopted resource-related plans, and the policies and procedures contained therein, of other federal agencies, State and local governments, and Indian tribes, so long as the guidance and resource management plans also are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands" (43 CFR 1610.3-2(a)); see 43 U.S.C. 1712(c)(9).

The general requirement in FLPMA and the BLM planning regulations is to coordinate the resource management planning process with plans of other agencies, States, and local governments to the extent consistent with law (see FLPMA Section 202(c)(9) and 43 CFR 1610.3-1(a)) and the respective duties to be consistent with both officially approved or adopted plans (to the extent those plans are consistent with federal law or to the maximum extent practical; see 43 CFR 1610.3-2(a)(b)). In accordance with FLPMA, the BLM was aware of and gave consideration to State, local, and tribal land use plans and provided meaningful public involvement throughout the development of the Central Yukon RMP/EIS.

The BLM is aware that there are specific State laws and local plans relevant to aspects of public land management that are separate and independent of federal law. However, the BLM is bound by federal law; as a consequence, there may be inconsistencies that cannot be reconciled. The FLPMA and its implementing regulations require that the BLM's RMPs be consistent with officially approved State and local plans only if those plans are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands.

Where officially approved State and local plans or policies and programs conflict with the purposes, policies, and programs of federal laws and regulations applicable to public lands, there will be an inconsistency that cannot be resolved. With respect to officially approved State and local government policies and programs (as opposed to plans), this consistency provision applies only to the maximum extent practical.

The 60-day Governor's consistency review period ended on June 25, 2024. The Alaska Department of Resources responded on behalf of the Governor on June 25, 2024, and identified the following seven issues:

1. The Proposed Plan [the Central Yukon Proposed RMP/Final EIS] frustrates the State's and federal government's obligations under the Statehood Act and the Alaska Land Transfer Acceleration Act.

2. The Proposed Plan recommends leaving in place PLO 5150 and most of the ANCSA 17(d)(1) withdrawals. The failure to lift the PLOs is a land entitlement issue and is inconsistent with approved State plans.
3. The Proposed Plan is inconsistent with the federal statutes that implement the goals of the Alaska Statehood Act and protect the State's resource management responsibilities.
4. North Slope Area Plan did not find any lands suitable for management as ACECs.
5. Inconsistencies with State Land Use Plans, Policies, and Terminology
6. The Proposed Plan and planning process failed to meet the commitments in the Master Memorandum of Agreement between the Alaska Department of Fish and Game and the BLM, which outlines the general guidelines within which the two agencies agree to operate, and with Alaska Department of Fish and Game's 2015 Alaska Wildlife Action Plan.
7. The Proposed Plan is inconsistent with the goals of the Dingell Act. The Proposed Plan fails to outline how it is expanding general hunting and fishing opportunities, as required in the Dingell Act.

On August 13, 2024, the BLM Alaska State Director notified the Governor that he had determined that only one of these points (North Slope Area Plan) was within the scope of the Governor's Consistency Review Process, which is narrow in scope and intended to address only those situations where the Proposed RMP/Final EIS may be inconsistent with officially approved or adopted State or local land use plans, policies, or programs. Nevertheless, the BLM determined that the Proposed Plan was not inconsistent with the State's land use plans, programs, and policies. **Appendix N**, the BLM State Director's Response to the Alaska Governor's Consistency Review, is a copy of the State Director's response.

While the BLM determined that the Proposed RMP/Final EIS was not inconsistent with the State's land use plans, programs and policies, the BLM listed and reviewed the following three State plans in the Approved RMP, **Appendix C**, Relationship to BLM Policies, Plans, and Programs.

- North Slope Area Plan
- Dalton Highway Master Plan
- Northwest Alaska Transportation Plan

Overall, the State identified issues which were not consistency issues per 43 CFR 1610.3-2 as the issues did not pertain to an inconsistency with State plans; however, in the interest of open discussion, the BLM responded in the Governor's consistency letter.

On September 13, 2024, the Governor of Alaska appealed to the BLM Director the Alaska State Director's decision not to accept the State's recommendations. In the Governor's appeal letter, the Governor requested that the BLM Director reconsider the issues and recommendations raised in the Governor's Consistency Review letter. After careful review and consideration, the BLM Director determined that the Alaska State Director properly considered all applicable State and local plans, policies, and programs in the Central Yukon planning effort, and that no changes are necessary to provide for a reasonable balance between the national interest and the State's interest. Consistent with the BLM regulations at 43 CFR 1610.3-2, the Director's response will also be published in the *Federal Register*.

1.10 Consultation and Coordination

The BLM land use planning regulations (43 CFR 1610.3), FLPMA (43 U.S.C 1712), and regulations for implementing NEPA (40 CFR 1501.5 and 1501.6) guide the BLM in coordinating and cooperating with other federal and State agencies, local governments, and Native American Tribes during the land use planning process. This collective guidance instructs the BLM to:

- Stay informed of federal, State, local, and tribal plans
- Ensure it considers these plans in its own planning
- Help resolve inconsistencies between such plans and BLM planning
- Cooperate with other agencies and tribal governments in developing RMPs and NEPA analyses

The BLM has used multiple strategies to foster a collaborative approach, improve communication, and aid in understanding of the issues and the process used in development of this Approved RMP. Opportunities included formal and informal consultation with agencies, federally recognized Tribes, ANCSA corporations, groups, and individuals; public meetings; workshops; a project website; correspondence and meetings with agencies and interest groups; and individual contacts. Despite challenges and limitations imposed by the COVID-19 pandemic, the BLM continued efforts to promote communication and collaboration with various groups in the development of the RMP.

1.10.1 Intergovernmental and Interagency Cooperation

NEPA and its associated regulatory and policy framework require all federal agencies to involve interested groups of the public, as well as State and local governments, other federal agencies, interested Tribes, and Alaska Native corporations in the decision-making process. The BLM is the lead agency for the Central Yukon RMP/EIS and is responsible for this involvement. A cooperating agency is any federal, State, or local government agency or federally recognized Tribe that has jurisdiction by law or special expertise within the planning area. Cooperating agencies enter into formal agreements with the lead federal agency to assist in developing an environmental analysis. Per the BLM Land Use Planning Handbook, cooperating agencies "work with the BLM, sharing knowledge and resources, to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks" (BLM 2005).

The BLM invited agency cooperation early in the RMP process using the process outlined in 43 CFR 1501.6. At the beginning of the planning process, the BLM sent letters of invitation to 10 local, State, federal, and tribal representatives, inviting them to participate as cooperating agencies for the RMP/EIS. The Allakaket Village, Native Village of Ruby, Native Village of Tanana, Native Village of Venetie Tribal Government, Nulato Village, State of Alaska, USFWS, and Village of Koyukuk agreed to participate in the RMP/EIS as designated cooperating agencies. They signed memoranda of understanding with the BLM establishing their role as cooperating agencies. See **Appendix B,** Collaboration and Coordination for a detailed summary of the BLM's interactions with established and potential cooperating agencies, as well as how their input was considered and incorporated.

1.10.2 BLM Alaska Resource Advisory Council Collaboration

The BLM Alaska Resource Advisory Council (RAC) is a committee established by the Secretary of the Interior to provide advice or recommendations to BLM management (BLM 2005). The Alaska RAC consists of up to 15 members of the public representing different areas of expertise. It includes a cross section of Alaskans from around the state representing energy, tourism, and commercial recreation interests;

environmental, archaeological, or historic interests; and elected officials, Alaska Native organizations, and the public at large. The Secretary appoints council members based on their ability to provide informed, objective advice on a broad array of public lands issues and their commitment to collaboration in seeking solutions to those issues.

The BLM has updated the Alaska RAC on the progress and availability of materials relating to the Central Yukon RMP and has continued to seek input from the Alaska RAC throughout the Central Yukon planning process. See **Appendix B,** Collaboration and Coordination for a detailed summary of the BLM's interactions with the Alaska RAC.

1.10.3 Consultations with Tribes and Alaska Native Corporations

In addition to NEPA, the BLM conducts government-to-government consultation with federally recognized Tribes and Alaska Native corporations in accordance with numerous legal and regulatory guidelines, including Executive Order 13175, Consultation and Coordination with Indian Tribal Governments; Joint Secretarial Order 3403 on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters; and the current Department of the Interior policy on consultation with ANCSA corporations.

See Section B2 of **Appendix B,** Collaboration and Coordination, for a detailed summary of the BLM's interactions with federally recognized Tribes and Alaska Native corporations, as well as how their input was considered and incorporated.

1.10.4 National Historic Preservation Act Section 106 Consultation

Similar to NEPA, Section 106 of the National Historic Preservation Act (NHPA) requires that all federal agencies consult with "consulting parties" in the decision-making process, which can include interested groups of the public, as well as State and local governments, other federal agencies, interested Tribes, and Alaska Native corporations (36 CFR 800). The NHPA implementing regulations are found in 36 CFR Part 800 and Part 60. While Parts 800.3 through 800.6 provide for the standalone implementation of Section 106, Part 800.8(c) provides a process that meets the Section 106 obligation through the NEPA process; this is the "NEPA substitution" method of compliance used for the Central Yukon RMP.

See **Appendix B (**Collaboration and Coordination) for a detailed summary of the BLM's interactions with consulting parties, as well as how their input was considered and incorporated.

1.10.5 US Fish and Wildlife Service Consultation

To comply with Section 7(c) of the Endangered Species Act of 1973, in 2021 the BLM consulted with the USFWS early in the planning process. The USFWS provided input on planning issues, data collection and review, and alternatives development. After consultation, the USFWS determined that there are no endangered species in the planning area. In 2024, the BLM again consulted with the USFWS and requested an official species list. The USFWS determined that there are no endangered species in the planning area.

1.10.6 National Oceanic and Atmospheric Administration Consultation

In June 2024, the BLM initiated consultation with National Oceanic and Atmospheric Administration Fisheries, otherwise known as the National Marine Fisheries Service, regarding essential fish habitat and the recommendation to the Secretary to revoke in part 11,178,000 acres of ANCSA 17(d)(1) withdrawals for the limited purpose of allowing the selection of Native allotments in compliance with the Dingell Act.

The National Oceanic and Atmospheric Administration replied on July 1, 2024, that this action would have no effect on essential fish habitat. Additional essential fish habitat consultation was not necessary.

1.11 Availability of the Approved RMP

Copies of the Central Yukon ROD and Approved RMP are available on request on the BLM website at https://eplanning.blm.gov/eplanning-ui/project/35315/510 and on request from the following locations:

- BLM Central Yukon Field Office and Fairbanks District Office, 222 University Avenue, Fairbanks, Alaska 99709, (907) 474-2200
- BLM Alaska Public Information Center, James M. Fitzgerald Federal Building, 222 West 7th Avenue, Anchorage, Alaska 99513, (907) 271-5960
- Alaska Resources Library and Information Services, 3211 Providence Drive, Suite 111, Anchorage, Alaska 99508, (907) 786-7651

1.12 Approval

The decision is hereby made to approve the attached RMP. This ROD serves as the final decision for the RMP and becomes effective on the date it is signed by the BLM State Director.

Approved by:

STEVEN
COHN

Digitally signed by STEVEN
COHN
Date: 2024.11.12 13:18:29
-09'00'

Steve Cohn
Alaska State Director
November 12, 2024

APPROVED RESOURCE MANAGEMENT PLAN

This page intentionally left blank.

2. APPROVED RESOURCE MANAGEMENT PLAN

2.1 Purpose of and Need for the Resource Management Plan

The purpose of this RMP is to develop management decisions to guide future land management in the planning area and subsequent site-specific projects. These decisions establish goals and objectives for day-to-day and long-term resource management. To achieve these goals and objectives, the Approved RMP identifies which uses (allocations) are allowable, restricted, or prohibited.

The need for the revised Central Yukon RMP is to provide guidance and to address changes in resources, circumstances, laws, policies, and regulations in the planning area since the existing plans were developed in the 1980s and 1990s. The Draft RMP/EIS reviewed existing land withdrawals and if warranted, recommended partial or full revocations to the Secretary of the Interior. Such withdrawal revocations will make lands available for selection and appropriation, including land allotments by Alaska Native Vietnam-era veterans under Section 1119 of the Dingell Act. During scoping for the regulations implementing the act, the BLM and the Department of the Interior heard from Alaska Natives that the pool of available lands open for selection is not sufficient (BLM 2022). Under the Approved RMP, the BLM is recommending that the Secretary revoke in part the existing ANCSA 17(d)(1) withdrawals to allow for Alaska Native Vietnam-era veteran selections.

2.1.1 Planning Area

The planning area boundary encompasses approximately 56 million acres; however, within that boundary the BLM only manages approximately 13.3 million acres (**Appendix A**, Maps, **Map 1.1**, **Map 1.2**, and **Map 1.3**). Federal lands managed by other federal agencies within the planning area include portions of the Gates of the Arctic National Park and Preserve; the Koyukuk, Innoko Northern Unit, Nowitna, and Kanuti National Wildlife Refuges; and the U.S. Army Tanana Flats and Donnelly training areas.

The Approved RMP will apply only to the 13.3 million acres of BLM-managed lands. The BLM manages its own subsurface acres, as well as subsurface acres administered by other federal agencies.

The planning area includes designated utility and transportation corridors that were identified by the State of Alaska as part of its ongoing Roads to Resources Initiative. The State has proposed individual projects from the initiative and will likely propose more in the future. Additional changes affecting the planning area are increased demand for recreational resources and increased access along the Dalton Highway after it opened to public travel in the 1990s.

Approximately 1,304,000 acres of BLM-managed lands are withdrawn to the military. The Department of Defense controls access to these lands and to all other lands withdrawn for military purposes, and any BLM-issued authorization on those lands is subject to concurrence by the applicable Department of Defense department. Therefore, lands withdrawn for military use are not included in the decision area (the lands managed by the BLM) for this Approved RMP except to the extent to describe management if the land returns to the public domain.

The planning area overlaps portions of the Northwest Arctic Borough, the North Slope Borough, the Denali Borough, and the Fairbanks North Star Borough; however, most of the planning area is not within any borough boundary. BLM decisions apply only to BLM-managed lands within the planning area boundary. The planning area boundary includes 24 remote villages; of these, 20 have federally recognized Tribes, 13 have ANCSA village corporations, and 3 have ANCSA regional corporations (Doyon, Limited; Arctic Slope Regional Corporation; and NANA Regional Corporation; see **Appendix B**, **Table B-2**, for a list).

The Approved RMP applies only to the BLM-managed public lands within the planning area. The planning decisions and descriptions in the Approved RMP do not change land use management for National Wildlife Refuge lands, NPS lands, Department of Defense lands, or those agencies' subsurface lands; nor do they apply to private lands, Alaska Native Corporation lands, or lands conveyed to the State of Alaska, Alaska Native Corporations, or to private individuals.

The BLM initiated development of this Approved RMP with publication of a Notice of Intent to prepare an RMP and associated EIS in the *Federal Register* on June 14, 2013. A Notice of Planning Area Boundary Changes for Bureau of Land Management Resource Management Plans in Alaska was issued on October 7, 2015. This boundary change resulted in shifting 2.8 million acres of the planning area, managed by the Fairbanks District Office, into the Bering Sea-Western Interior planning area, managed by the Anchorage District Office. An Amendment to Notices of Intent to Prepare Resource Management Plans for Central Yukon and Bering Sea-Western Interior Planning Areas and Associated Environmental Impact Statements was issued concurrently.

BLM-managed lands are scattered and range from parcels of a few acres up to contiguous blocks of 1 million or more acres. To include all BLM-managed lands in the RMP, the planning area boundary is drawn on a large scale. **Map 1.1** in **Appendix A** illustrates the land status of the planning area; this is also outlined in **Section 1.1**, Introduction. **Map 1.2** in **Appendix A** illustrates the BLM-managed lands in the decision area. **Map 1.3** shows the current PLO in the decision area.

The lands in this Approved RMP referred to as the surface decision area are 13,264,000 acres of BLM-managed lands. Underlying the surface decision area are 219,000 acres of subsurface patented to regional corporations that are not managed by the BLM and are therefore not changed by this Approved RMP. The remaining 13,045,000 acres are BLM-managed subsurface minerals that are referred to as the subsurface decision area in the Approved RMP.

2.1.2 Scoping Issues and Public Involvement

The formal public scoping process for the RMP revision began with the publication of the Notice of Intent in the *Federal Register* on June 14, 2013. The BLM also posted the Notice of Intent on the project website (https://eplanning.blm.gov/eplanning-ui/project/35315/510), thereby notifying the public of its intent to revise the RMP. The Notice of Intent provided background information on the RMP planning area, applicable documents and reports, a project timeline, information about the planning process, meeting information, news releases, contact information, and other resources. The BLM notified the public of the scoping process via a postcard mailing and email to mailing list recipients and parties with a known interest, a newsletter, emails, news releases, and public service announcements.

In 2013, the BLM held 16 public meetings in 15 different communities during the scoping period. Meetings generally consisted of a short open house, followed by a presentation and then public testimony. A total of 291 people signed in at the meetings. Besides the scoping meetings, approximately 70 individuals, agencies, and organizations provided written comments. An additional 2,900 form letters were submitted via email as of January 28, 2014. The BLM received additional comments and nominations for ACECs between July and early September 2014. Detailed information about the comments received and about the public outreach process can be found in the scoping report for the RMP, which was finalized in March 2015 (BLM 2015); this report can be found at https://eplanning.blm.gov/eplanning-ui/project/35315/510.

In the winter of 2017, the BLM invited landowners, stakeholders, and the public to meetings to discuss the Draft RMP/EIS. Ten meetings were held in communities across Interior Alaska and in the cities of Fairbanks and Anchorage. Attendees were encouraged to submit comments formally at the meeting via a comment form or after the meeting via mail or email. Comments were accepted from January 17 through March 31, 2017. The BLM received 1,164 comments and then used them to inform the development of the alternatives of the Draft RMP/EIS.

In 2021, due to the COVID-19 pandemic, the BLM held seven virtual public meetings instead of in-person public meetings to prioritize the health and safety of participants during the public involvement period for the Draft RMP/EIS. BLM staff at each meeting shared a presentation on the Draft RMP/EIS, held an ANILCA Section 810 subsistence hearing, answered questions, and helped the public submit written or oral comments.

2.1.3 Issues Considered

An issue is defined as a matter of controversy or dispute over resource management activities or land use and entails alternatives between which to decide. Usually, the causal relationship between the activity or use and undesirable results are well defined or can be documented, and the level of controversy is high enough to merit further analysis. A statement of planning issues orients the planning process so that interdisciplinary thought, analysis, and documentation is directed toward resolving the planning issues during preparation of the RMP. After analysis of scoping comments, the BLM identified 13 preliminary planning issues:

1. Management of access and comprehensive travel management,
2. Climate change,
3. Fish and aquatic species habitat management,
4. Invasive and nonnative species,
5. ANCSA withdrawals,
6. Utility corridor withdrawal,
7. Management of mining,
8. Management of sand and gravel,
9. Management of recreation and visitor services,
10. Subsistence,
11. Management of wildlife habitat,
12. Water quality, wetlands, and riparian habitat management, and
13. Wilderness characteristics

2.1.4 Issues Considered but Not Further Analyzed

In addition to planning issues, scoping comments also addressed issues that are policy or administrative actions and issues that the BLM has addressed or will address outside the RMP. The comments also involved issues that are outside the scope of the RMP/EIS, either because they involve decisions the BLM does not have authority to make at the planning level or because the issues are not appropriate planning decisions. These issues are discussed in more detail in the scoping report produced for this RMP effort (BLM 2015).

2.1.5 Planning Criteria and Legislative Constraints

The BLM developed preliminary planning criteria for focused planning of the RMP and to guide decision-making by topic. The agency introduced these criteria to the public for review in the Notice of Intent published in the *Federal Register* on June 14, 2013, and at all scoping meetings (78 *Federal Register* 35957). The public was encouraged to comment on and suggest additions to these criteria. During scoping, individuals, organizations, agencies, and Tribes identified planning criteria, as follows:

- The primary purpose of the lands withdrawn by PLO 5150 is the transportation of energy resources; therefore, the BLM will avoid proposing actions or activities with potential adverse impacts on existing and future energy transportation systems on the lands within the corridor.
- The BLM CYFO will encourage opportunities for public participation throughout the planning process.
- The BLM will recognize and protect valid existing rights.
- The BLM will consider subsistence uses and minimize adverse impacts in accordance with Section 810 of ANILCA.
- The BLM will work cooperatively with State and federal agencies, Native corporations, tribes, and municipal governments.
- The BLM will consider plans and policies of adjacent CSUs, landowners, and local governments.
- The BLM will consider Department of the Interior guidance, Alaska Department of Fish and Game objectives, and Federal Subsistence Board requirements and mandates in decisions related to wildlife management.
- The RMP will be consistent with the BLM H-1601-1 Land Use Planning Handbook, Appendix C, Program-Specific and Resource-Specific Decision Guidance, and applicable BLM manuals and handbooks.
- The plan will be consistent with the standards and guidance set forth in FLPMA, NEPA, CEQ, NHPA, Wild and Scenic Rivers Act, Migratory Bird Treaty Act, ANILCA, and other federal laws, regulations, and policies, as required.
- The plan will be consistent with the BLM Alaska Land Health Standards.
- The BLM will complete designations for OHVs for all BLM-managed lands within the planning area according to the regulations found in 43 CFR 8342.
- Within the utility corridor development nodes, the BLM will assess areas designated by the BLM in the Utility Corridor RMP/ROD (BLM 1991) for future development (i.e., visitor facilities, restrooms, rest stops) regarding the location, size, boundaries, appropriate uses, and long-range development, State or federal management, and effects on adjacent and nearby lands.
- The plan will address public access needs.
- The BLM will consider current and potentially new special designations, such as ACECs and RNAs, using the criteria found in 43 CFR 1610.7-2 and 43 CFR 8223.

- Review and classification of waterways as eligible for inclusion in the National Wild and Scenic Rivers System will be consistent with the guidance in BLM Manual 6400 – Wild and Scenic Rivers (BLM 2012a).
- The BLM will incorporate environmental justice considerations in land use planning alternatives to adequately respond to environmental justice issues facing minority populations, low-income communities, and Tribes living near public lands and using public land resources.
- The plan will assess all BLM-managed lands in the planning area for wilderness characteristics, using criteria established by BLM Manual 6310. The RMP will examine options for managing LWCs and determine the most appropriate land use allocations for these lands. Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: (1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; (2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts on wilderness characteristics; and (3) the protection of wilderness characteristics as a priority over other uses.
- The BLM will manage the CAMA WSA consistent with BLM Manual 6330 – Management of BLM Wilderness Study Areas (BLM 2012c) and ANILCA, until Congress acts on the wilderness recommendation.

Members of the public recommended the following new planning criteria, but the BLM adopted neither of them because number 1 was inconsistent with the BLM's multiple-use mandate and number 2 was inconsistent with the intent of the alternatives:

1. The BLM will consider non-road alternatives a priority over road developments to minimize adverse impacts on subsistence and wildlife habitat.
2. All components of an individual alternative must be complementary, in that there will be no internal inconsistencies in a single alternative.

The following edit to a planning criterion was suggested, which the BLM has now adopted as a part of its planning criteria:

- The BLM will consider Department of the Interior guidance, Alaska Department of Fish and Game and USFWS objectives, and Federal Subsistence Board requirements and mandates in decisions related to wildlife management.

The BLM added the following planning criteria during the planning process:

1 The RMP/EIS will evaluate public access and recreational opportunities when evaluating land tenure decisions, consistent with Secretarial Order 3373.

2 The BLM will advance efforts to expand hunting, fishing, and recreational opportunities, consistent with Secretarial Orders 3347, 3356, and 3366.

3 The BLM will make lands available for selection and appropriation to allow for the selection of Native allotments pursuant to the Dingell Act.

4 The planning process will incorporate measures to protect against wildfires, consistent with Secretarial Order 3372.

2.1.6 Planning Process

The planning process formally began with the Notice of Intent in the *Federal Register* on June 14, 2013. It continued through the end of the Governor's consistency review and protest resolution periods leading up to the signed Central Yukon ROD and Approved RMP. The RMP was initiated under the authority of Section 202(f) of FLPMA and was guided by BLM planning regulations in 43 CFR 1600. Additionally, the EIS is subject to Section 202(c) of NEPA and guided by the CEQ regulations in 40 CFR 1500, as well as the requirements of BLM NEPA Handbook 1790-1 (BLM 2008a).

The BLM uses a multistep planning process when developing RMPs, as required by 43 CFR 1600 and illustrated in the BLM's Land Use Planning Handbook (BLM 2005). The planning process is designed to help the BLM identify the uses of BLM-managed lands desired by the public. The process considers these uses to the extent they are consistent with the laws established by Congress and the policies of the executive branch of the federal government. The planning process is issue driven. The BLM used the public scoping process to identify planning issues (**Section 1.3**, Alternatives, and BLM 2015) to direct the development of the RMP. The scoping process also was used to introduce the public to planning criteria.

Title II, Section 202 of FLPMA directs the BLM to coordinate planning efforts with Native American Tribes, other federal departments, and agencies of the State and local governments as part of its land use planning process. The BLM is also directed to integrate NEPA requirements with other environmental review and consultation requirements to reduce paperwork and delays (40 CFR 1500.4-5). The BLM coordinated with Native American Tribes and other agencies and was consistent with other plans through ongoing communications, meetings, and collaboration with an interdisciplinary team, which includes BLM specialists and federal, State, and local agencies.

The RMP interdisciplinary team used the BLM planning process according to the BLM's Land Use Planning Handbook (BLM 2005) to develop a range of reasonable alternatives for the RMP that would meet FLPMA's multiple-use and sustained-yield mandates; address the planning issues compiled from the public, cooperating agencies, and the BLM interdisciplinary team; and fulfill the RMP's purpose and need (**Section 1.1**, Introduction) by addressing management needs and opportunities for the planning area.

2.1.7 Related Plans

The BLM RMPs and amendments must be consistent, to the extent practical, with officially approved or adopted resource-related plans of State and local governments, other federal agencies, and tribal governments so long as the guidance and RMPs are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands (43 CFR 1610). The BLM provided a 60-day Governor's Consistency Review period, which is discussed in **Section 1.9.6** of the ROD. Consistency with other plans is also addressed in **Appendix C**.

In Alaska, public land management is further directed by ANILCA, ANCSA, and the Alaska Statehood Act, particularly in regard to land tenure, access, and subsistence. Under the Alaska Statehood Act, the State of Alaska was allowed to select 104 million acres of federal land. Approximately 26 percent of BLM-managed land in the planning area is State-selected land. ANCSA requires the transfer of 44 million acres of public land to Alaska Native corporations. Approximately 7 percent of BLM-managed land in the planning area is Native-selected land. Because conveyance of State- and Native-selected lands is ongoing, the implementation of planning decisions on selected lands may be delayed until final ownership is determined.

Appendix C contains a list of other policies, guides, and plans that the BLM considered during the planning process, including BLM plans, other federal agency plans, State of Alaska plans, local government plans, a Native Alaska Native council plan, and an ANCSA corporation plan.

2.1.8 Policy

This Approved RMP is consistent with and incorporates requirements identified in various laws, regulations, and policies. These include executive orders, legislative designations, and court settlements and rulings. The policies and decisions that existed before this RMP are outside the RMP's scope, but they have influenced the decisions and constrained the alternatives. They are also needed to understand management of the decision area.

2.2 Introduction to the Management Decisions

The BLM CYFO prepared the Central Yukon RMP to provide comprehensive current and future management of BLM-managed lands in the Central Yukon Planning Area. This is the Approved RMP for the public lands within the planning area administered by the BLM CYFO. The Approved RMP adopts the management described in *Management Actions Common to All Alternatives* and management actions specific to Alternative E, as presented in the Proposed RMP/Final EIS.

This section of the Approved RMP presents the goals, objectives, actions, allowable uses, and stipulations established for BLM-managed lands in the decision area. Most of the desired future conditions are long range and are assumed to require a period of time to achieve. These management decisions are presented by program area under four category headings: resources, resource uses, special designations, and social and economic conditions. They are further organized under the program area by the type of decision (Goal, Objective, Action, or Allocation). Some management decisions are also marked with a sub-category that they relate to in addition to the program area they are organized under. Not all types or sub-categories of decisions were identified for each program area.

Appendix A shows the maps of decisions and decision-related baseline information (for example, permafrost areas and ecoregions). **Appendixes B** through **M** contain supporting information for decisions outlined in the Approved RMP and are referenced accordingly. Stipulations and SOPs applicable to this Approved RMP are described in **Appendix E**.

All acreages and maps presented in the Approved RMP are estimations, based on current data. Calculations depend on the quality and availability of data, and most calculations in this RMP are rounded to the nearest 1,000 acres or 0.1 mile. Given the scale of the analysis, the compatibility constraints between datasets and lack of data for some resources, all calculations are approximate; they are for comparison and analytic purposes only. Likewise, the figures in **Appendix A** are provided for illustrative purposes and subject to the limitations discussed above. Updating these data is considered plan maintenance, which will occur over time as the Approved RMP is implemented, additional surveys and monitoring are completed, and information is revised.

2.3 Management Decisions: Resources

2.3.1 Air Quality and Climate

Goal:

1. Ensure that authorizations and management activities do not degrade air quality and related resource values in the planning area.

Objectives:

1. Ensure that authorizations and management activities comply with National Ambient Air Quality Standards and all applicable federal, tribal, State, and local air quality laws, statutes, regulations, standards, and implementation plans.
2. Reduce air quality and air quality-related impacts by including management actions to reduce emissions of criteria and hazardous air pollutants.

Actions:

1. Implement wildland fire smoke mitigation measures adopted by the Alaska Wildland Fire Coordinating Group and consider public health and safety in all fire management activities.
2. Ensure that prescribed burns adhere to smoke management requirements set by the Alaska Department of Environmental Conservation.
3. Require all authorization holders to mitigate any activity that may result in unacceptable air quality.
4. Require design features or mitigation measures to reduce fugitive dust emissions from construction activities and, as appropriate, sites with surface disturbance.
5. Require design features or mitigation measures to reduce fugitive dust emissions from travel on unpaved roads.
6. Ensure activities in nonattainment and maintenance areas meet the applicable national ambient air quality standards and comply with Clean Air Act general conformity requirements within the Fairbanks North Star Borough nonattainment/maintenance area.
7. Activities would be authorized so long as they meet the PM2.5 standards for the Fairbanks North Star Borough nonattainment/maintenance area.

2.3.2 Soils

Goals:

1. Ensure that watersheds are in, or are making substantial progress toward, a properly functioning physical condition, which includes their soils in upland, riparian, wetland, and aquatic areas.
2. Ensure the infiltration and permeability rates, moisture storage, and stability of soils are appropriate to the watershed's soil, climate, and landform.
3. Manage sensitive soil types—permafrost, riparian, wetland, steep slopes (greater than 35 percent), and aquatic areas—so they are adequately protected from degradation, due to land-disturbing activities.

4. Increase efforts to inventory and monitor soil resources in the planning area.
5. Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land, its ecological processes, such as hydrological function of watersheds, and provide the ecosystem services associated with properly functioning aquatic and riparian-wetland habitat.

Objectives:

1. Do not allow mineral soil loss to exceed the average rate of soil accumulation, based on reference conditions.
2. Maintain organic matter in amounts sufficient to prevent substantial short- or long-term nutrient cycle deficits and to avoid detrimental physical and biological soil conditions.
3. Maintain or improve soil productivity by increasing vegetation cover and reducing soil compaction and erosion in disturbed areas.
4. Ensure that infiltration and permeability of organic and mineral soils is consistent with the reference condition to the extent practicable.
5. Promote maintenance of soil properties and vegetation conditions consistent with the potential of the site.
6. Ensure that soils are free from pollutants that could alter ecosystem integrity or affect public health. Work toward remediation of sites in the planning area with soils impacted by oil spills or other hazardous material releases.
7. Design disturbance and reclamation activities to minimize the extent of hydrologic heaving, slumping, or thawing of permafrost.

Actions:

1. For all surface-disturbing activities, require stockpiling and protection of all topsoil and organic material for use in reclamation.
2. Promote concurrent reclamation whenever technically feasible; this will not be appropriate to all types of authorized activities.
3. Complete reclamation as soon as practical to avoid loss of topsoil.
4. Monitor highly erodible soils, soils associated with permafrost, and representative soil types for changes in conditions. If monitoring determines that soil properties are becoming degraded due to OHV use or other surface-disturbing activities, then develop and implement appropriate management actions such as review of OHV use limitations and relocation, hardening, or closure of trails.
5. Consider requiring soil surveys on authorized surface disturbing activities greater than 5 acres, to determine ecological site potential and establish a baseline. The purpose of the soil survey would help to determine existing soil types on-site and thereby guide the selection of more appropriate reclamation measures and project site selection.
6. For all authorized activities, incorporate necessary design and equipment considerations, including route selection and avoidance of sensitive soil types.

7. **(Motorized Routes):** If authorized uses break the vegetation mat, consider requiring the holder to make necessary repairs or reduce/change use to limit future soil change before continuing use of the route.
8. **(Fluid Leasable Minerals):** Apply controlled surface use stipulations to fluid mineral leases (**Appendix E**) on slopes greater than 35 percent and in areas with sensitive soils.
9. **(Fluid Leasable Minerals):** Before sensitive soils are disturbed, require a BLM AO-approved reclamation plan. The plan must demonstrate the following: (1) no other reasonable alternatives exist for relocating the activity, (2) the activity would be located to reduce impacts on soil and water resources, (3) surface runoff and sedimentation would be adequately controlled, (4) on- and off-site areas would be protected from accelerated erosion, (5) no areas susceptible to mass wasting would be disturbed, and (6) surface-disturbing activities would be prohibited or appropriate mitigations applied during extended wet periods.
10. **(ROWs):** Require ROWs on sensitive soils and slopes greater than 35 percent to incorporate necessary design and equipment considerations, to meet soil resource objectives.
11. **(Forestry):** Implement provisions in the Alaska Forest Resources and Practices Act (Alaska Statute 41.17).

2.3.3 Water, Fish, and Riparian and Wetland Vegetation

Goals:

1. Soil and plant conditions support infiltration, soil moisture storage, and the release of water; ensure that they are in balance with climate and landforms and should maintain or improve water quality, water quantity, and timing and duration of flow.
2. Ensure that surface water and groundwater quality comply with federal and State water quality standards.
3. Ensure that the hydrologic cycle remains in balance and supports healthy, productive, and diverse biotic populations and communities.
4. Ensure that riparian zones are fully functional over the width of the 100-year floodplain.
5. Ensure that watersheds closely approximate natural successional processes and hydrologic regimes.
6. Ensure that physical, chemical, and biological properties of soil support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds.
7. Ensure that ecosystem services are associated with properly functioning aquatic and riparian habitat.
8. Maintain natural input rates into aquatic systems of sediment, organic matter, and nutrients.
9. Maintain watersheds to create and sustain functional terrestrial, riparian, aquatic, and wetland habitats that can support diverse populations of native aquatic- and riparian-dependent species.
10. Ensure the integrated ecological functions of rivers, streams, wetlands, lakes, and the associated riparian areas.

11. Retain the many significant values and ecosystem services associated with properly functioning aquatic and riparian habitat: biological diversity, recreation, aesthetics, soil productivity, water quality, food, and raw materials.
12. Maintain properly functioning riparian, wetland, and aquatic vegetation at levels appropriate to the watershed's soils, climate, and landform.

Objectives:

1. Maintain water quality to prevent the listing of any streams on BLM-managed lands as impaired pursuant to Section 303(d) of the Clean Water Act, resulting solely from BLM-authorized activities.
2. Within 80 percent of any stream reach when practicable, maintain streambank stability greater than 95 percent for A, B, and E channel types and greater than 90 percent for C channel types (see **Appendix G**, Aquatic and Riparian Resource Desired Conditions and Objectives).
3. Maintain sufficient surface water and groundwater flows to keep hot springs beneficial uses and the unique ecosystems.

Actions:

1. Apply to the State of Alaska for reservations of water for instream flows and water levels on high-value streams in the planning area.
2. Following documented occurrence of invasive plant species on the currently deployed nonnative invasive species (NNIS) list for management, or aquatic invasive species, develop a plan for eradication or control as soon as practicable.
3. Preserve stream flows necessary to protect fish and wildlife habitat, fish migration, and propagation and maintain and improve recreational and subsistence fisheries; protect for water quality.
4. Plan and carry out reclamation for all authorized surface-disturbing activities, targeting that the affected stream segment will be geomorphically stable, per BLM Handbook H-3809-1, Surface Management, as measured by channel form, floodplain connectivity, bedform diversity, and riparian vegetation (**Appendix G**).
5. Manage 155,000 acres of the narrow band of BLM-managed lands that extends toward Venetie as a ROW avoidance area to focus on finding suitable colocations for any proposed ROWs, to mitigate impacts on moose habitat and fish spawning in this narrow corridor.
6. All disturbances greater than 1 acre need a stormwater pollution prevention plan and compliance with the Construction General Permit.
7. Prohibit timber harvest within 50 feet of a waterbody, with the following exceptions, subject to AO discretion:
    - Subsistence harvest
    - ROW harvests within designated transportation and utility corridors.
    - Research harvest when the research purpose cannot be otherwise met.
    - Fuels management harvest when the fuels management purpose cannot be otherwise met.

  - Development and maintenance of federal administrative sites
  - Prohibition of non-subsistence collection of live vegetation other than timber within 50 feet of a waterbody.

8. **(Hot Springs):** Prohibit mineral materials disposal within a 160-acre square centered on hot springs (or, when needed, the 160-acre area would be determined by the BLM AO and a US surveyor).

9. **(Hot Springs):** Close to nonenergy solid mineral leasing and development within the 160-acre square area centered on hot springs.

10. **(Hot Springs):** Minimize surface-disturbing activities within the 160-acre square area centered on hot springs.

11. **(Hot Springs):** Apply no surface occupancy (NSO) stipulations to fluid mineral leasing (see **Appendix E**) within the 160-acre square area centered on hot springs, with an exception for geothermal leases or wells.

12. **(Hot Springs):** Manage the following hot springs as ROW exclusion:
    - Kanuti
    - Ishtalitna
    - Ray River
    - Kilo

13. **(Hot Springs):** Manage the 160-acre square area centered on hot springs as a ROW avoidance area.

14. **(Hot Springs):** Limit travel to existing trails within the 160-acre square area centered on hot springs.

15. **(Hot Springs):** Make leases available only for previously developed hot springs.

16. **(100-Year Floodplain):** Avoid, when practicable, mineral materials disposal within the 100-year floodplain within high-value watersheds.

17. **(100-Year Floodplain):** Avoid, when practicable, nonenergy solid mineral leasing and development within the 100-year floodplain of high-value watersheds.

18. **(100-Year Floodplain):** Close the 100-year floodplain of high-value watersheds to fluid mineral leasing and development.

19. **(100-Year Floodplain):** Apply NSO stipulations to fluid mineral leases (see **Appendix E**) within all 100-year floodplains not otherwise closed.

20. **(100-Year Floodplain):** Mark areas within the 100-year floodplain of high-value watersheds available for ROW location. ROW authorizations would include mitigations for instream crossing; any activity that disturbs the instream channel and riparian vegetation and causes erosion; surface disturbance associated with construction and maintenance of facilities or structures that are within the 100-year floodplain of high-value watersheds.

21. **(Lentic Areas):** The BLM AO will apply case-by-case analysis to determine any needed mitigation to minimize surface-disturbing activities within 0.25 miles of lentic areas.

22. **(Lentic Areas):** Apply NSO stipulations in areas within 0.25 miles of lentic areas to fluid mineral leasing and development.
23. **(Lentic Areas):** Within 0.25 miles of lentic areas, include in ROW authorizations mitigations for any surface-disturbing activity, as well as disturbance related to construction and maintenance of facilities in the riparian zone.

2.3.4 Vegetation (Including Nonnative Invasive Species)

Goals:

1. Manage BLM-authorized and casual use activities to maintain functional ecosystems composed of healthy and diverse native communities.
2. Attain the "desired future condition" of a landscape free of NNIS of concern.
3. Prevent alteration of and/or damage to intact native ecosystems in relation to NNIS of concern infestation.
4. Prevent NNIS of concern introduction and spread into intact native ecosystems.
5. Contain, control, or eradicate existing NNIS of concern infestations.
6. Integrate NNIS of concern prevention, control, and management into all BLM programs and functions within the planning area.
7. Coordinate with neighboring agencies, Tribes, landowners, and communities to implement early detection rapid response methods.

Objectives:

1. Coordinate with the State of Alaska and other landowners to build consistency in reclamation standards whenever possible, while meeting objectives for overall ecosystem function on BLM-managed lands.
2. Manage for ecosystem health by maintaining or achieving potential natural conditions, as defined in **Appendix K,** Reclamation Requirements for All Surface-Disturbing Activities.
3. Prevent introduction of NNIS of concern, by means of heightened awareness via education and outreach programs and adherence to early detection rapid response methods.
4. Prioritize NNIS of concern species for eradication or containment via early detection rapid response methods in accordance with the current BLM Alaska State Invasive Species Policy (IM 2022-008 as of publication).
5. Prioritize the eradication or containment of NNIS of concern infestations occurring in material extraction sites to minimize the probability of spread to uninfested areas.
6. Prioritize the implementation of early detection rapid response methods for aquatic NNIS of concern detected in surface waters used by floatplanes or watercraft.

Actions:

1. All actions implemented or authorized by the BLM would, as appropriate, include measures to prevent the introduction and spread of NNIS of concern. For all authorized activities, adhere to SOPs designed to prevent the introduction and spread of NNIS of concern. Collaborate with proponent to develop project specific BMPs where needed.
2. Include the following high priority habitats for early detection rapid response method application: anadromous streams, lakes, lichen-rich habitats, moose habitat, and berry picking areas.
3. Monitor vegetation communities for cumulative effects of wildland fire, suppression activities, and effects of excluding fire. Vegetation management may be used to remedy or restore forest health damage.
4. **(BLM-Authorized Activities):** BLM authorization holders are responsible for all costs and logistical coordination related to eradicating infestations of NNIS of concern that are demonstrated to result from their authorized activity. Before authorizing an activity, require applicants to implement an NNIS survey or coordinate with the BLM to determine whether an infestation is present. Annual reports from all authorized operations must include an update on NNIS presence and extent.
5. **(BLM-Authorized Activities):** Require that all BLM-authorized activities must comply with the current BLM Alaska State Invasive Species Policy, defined at the time of publication in IM 2022-008. Standard stipulations for invasive species management shall be required as applicable for authorized activities in accordance with the current BLM Alaska State Invasive Species Policy.
6. **(BLM-Authorized Activities):** At the discretion of the AO, potentially require proponents of proposed and existing authorized activities to work with other authorized public land users to establish cooperative weed management practices or plans.
7. **(BLM-Authorized Activities):** Allow methods of chemical control authorized by the BLM Vegetation Treatments using Herbicides in 17 Western States ROD (BLM 2007) or the successor document on using Aminopyralid, Fluroxypyr, and Rimsulfuron (BLM 2016a). Authorization holders are responsible for upholding the requirements for the use of those herbicides. Treatment monitoring and reporting requirements are outlined in the vegetation treatments ROD (BLM 2007). Additionally, use all other methods of chemical control authorized by subsequent BLM NEPA decisions, as appropriate. Approve beforehand any use of chemical control on BLM-managed lands and require that its requirements be followed, including in pesticide use proposals and reporting.
8. **(BLM-Authorized Activities):** Coordinate with other applicable agencies to implement the Arctic Invasive Alien Species Action Plan, and Safeguarding America's Lands and Waters from Invasive Species: A National Framework for Early Detection and Rapid Response. Coordinate with the Alaska Invasive Species Partnership for noxious and invasive plant management.
9. **(Wildland Fire):** The BLM would provide NNIS of concern awareness educational materials and/or training to the responsible fire protection agency/organization.
10. **(Wildland Fire):** Require the responsible fire protection agency/organization to adhere to BMPs for preventing the introduction and/or spread of NNIS of concern.

11. **(Wildland Fire):** Prioritize monitoring for NNIS of concern in burned areas, based on risk of NNIS of concern infestation (e.g., where ground-disturbing activities have occurred or where motorized equipment has been used) and/or resource value of burned area.
12. **(Weed-Free Material):** Promote through the authorization process the use of organic-based materials that are "certified weed-free," including feed, mulch, and erosion-control materials.
13. **(Casual Use):** Post signs on commonly used points of entry to BLM-managed lands (e.g., trailheads, airports, roads, and boat landings) to promote citizen awareness and responsibility in relation to NNIS of concern introduction and spread.
14. **(Casual Use):** Cooperate with rural communities and regional land managers to establish and implement hazard analysis critical control points, cooperative weed management areas, and outreach and educational programs.
15. **(Casual Use):** Cooperate with the State of Alaska on NNIS prevention related to use of navigable waterways by motorboats and floatplanes for casual and subsistence use.
16. **(Restoration—Uplands, Non-Riparian):** Promote rapid revegetation methods for the site, for example, seeding with native vegetation or importing topsoil.
17. **(ROWs—Avoidance):** Manage the following unique ecosystems as ROW avoidance areas:
    - Pingo cluster south of Lake Todatonten and adjacent to Kanuti Hot Springs
18. **Surface-Disturbing Activities—Reclamation Standards):** Subject to reclamation standards described in **Appendix K**.

2.3.5 Wildlife

Goals:

1. Manage wildlife habitat to ensure self-sustaining populations and a natural abundance, distribution, and diversity of wildlife.
2. Prevent disease transmission between domestic animals and wildlife.
3. Meet BLM and Alaska Department of Fish and Game species management objectives.

Objectives:

1. Provide habitat of sufficient quantity, quality, and connectivity to allow for stable populations of wildlife, using such metrics as the average recruitment rate or as otherwise defined by the BLM, in collaboration with the Alaska Department of Fish and Game and the USFWS.
2. Identify and characterize wildlife habitats.
3. Conduct periodic and systematic inventories of wildlife and wildlife habitat.
4. Effectively avoid or minimize impacts on wildlife and wildlife habitat.
5. Apply mitigation measures that effectively protect wildlife and wildlife habitat.
6. Minimize wildlife habitat fragmentation and impacts on wildlife.

7. Ensure that implementation-level plans include objectives specific to wildlife habitat protection.
8. Collaborate with other agencies and the public to ensure that wildlife and wildlife habitat goals and objectives are met. Monitoring programs will be conducted in coordination with the Alaska Department of Fish and Game.

Actions:

1. Designate moose, caribou, Dall sheep, and North American beaver as priority species in the planning area.
2. When authorizing projects, require that they incorporate design features or stipulations to mitigate impacts on wildlife, wildlife habitat, and wildlife movement.
3. Follow USFWS national and Alaska guidelines for timing recommendations for land disturbance and vegetation clearing to minimize the potential to disturb nesting birds (USFWS 2017).
4. Manage 155,000 acres of the narrow band of BLM-managed lands that extends toward Venetie as a ROW avoidance area, to focus on finding suitable colocations for any proposed ROWs to mitigate impacts on moose habitat and fish spawning in this narrow corridor.
5. **(Caribou):** Manage the Ray Mountains and Galena Mountain caribou herd ranges as core caribou habitat (see **Map 2.1**, Alternative E: Core Caribou Ranges, **Appendix A**).
6. **(Caribou):** Manage the following areas as timing limitations to summer OHV travel (no OHVs from May 1 to June 30):
    - Galena Mountain Core Caribou Range
    - Ray Mountains Core Caribou Range
7. **(Caribou) (Trails and Travel Management—Aircraft Restrictions):** Require operators of aircraft associated with BLM-authorized activities to maintain an altitude of at least 2,000 feet above ground level over core caribou ranges from May 1 to June 30.
8. **(Caribou) (Trails and Travel Management—Aircraft Restrictions):** Aircraft landings associated with BLM-authorized activities may be subject to timing limitations or prohibition in core caribou ranges at the discretion of the AO.
9. **(Caribou):** Close Ray Mountains Core Caribou Range to fluid mineral leasing and development.
10. **(Caribou):** Close Ray Mountains Core Caribou Range to nonenergy solid mineral leasing and development.
11. **(Caribou):** Close the Galena Mountain Core Caribou Range to mineral material disposal.
12. **(Caribou):** Manage core caribou ranges as ROW avoidance areas.
13. **(Dall Sheep):** Designate the following ACECs to protect Dall sheep habitat:
    - Galbraith Lake
    - Midnight Dome/Kalhabuk
    - Nugget Creek
    - Poss Mountain
    - Snowden Mountain
    - West Fork Atigun

14. **(Dall Sheep):** Manage 4,600 acres as Dall Sheep Habitat Areas (DSHAs); **Map 2.2**, Alternative E, Dall Sheep, **Appendix A**).
15. **(Dall Sheep) (Trails and Travel Management—Aircraft Restrictions):** DSHAs—Require authorized flights to be more than 2,000 feet above ground level over DSHAs from April 15 to August 30 (**Appendix H**).
16. **(Dall Sheep) (Fluid Minerals):** Apply NSO stipulations to fluid mineral leases within DSHAs (**Appendixes I** and **F**).
17. **(Dall Sheep) (Mineral materials):** Close DSHAs to mineral material disposal.
18. **(Dall Sheep) (Nonenergy Solid Leasable Minerals):** Close DSHAs to nonenergy solid mineral leasing and development (**Appendix H**)
19. **(Dall Sheep) (ROWs, Permits, and Leases, Excluding Wind and Solar):** Designate DSHAs as ROW avoidance areas.

2.3.6 Species of Special Concern (Including Special Status Species)

Goals:

1. Manage special status resources and habitats to be consistent with the conservation needs of special status species (SSS) as described in BLM Manual 6840 (BLM 2008b), in a manner that would not contribute to the need to list any species under the Endangered Species Act of 1973. Ensure progress toward recovery of any federally listed threatened or endangered species.
2. Identify, conserve, and monitor SSS and their respective habitats to ensure that their populations can persist in the planning area without population supplementation or habitat restoration.
3. **(Golden Eagle):** Protect priority golden eagle habitat from human disturbances that would substantially alter the distribution or abundance of golden eagles. Provide adequate habitat to ensure that prey abundance for golden eagles does not drop below a threshold that fully supports a healthy population.

Objectives:

1. **(Golden Eagle):** Avoid or minimize disturbance within 0.5 miles of golden eagle nests. The golden eagle is identified as a priority species in the planning area due to its diversity and remnant character.
2. Manage authorized uses to avoid or minimize negative impacts (i.e., activities are likely to result in a significant local or regional decline in species distribution, abundance, or productivity) on SSS habitat.

Actions:

1. Upon designation of SSS, identify distribution, key habitat areas, and special management needs.
2. **(Golden Eagle):** Support identification and monitoring of golden eagle nest sites across the decision area, with the purpose of preventing habitat impacts that may destabilize populations in the short term and negatively affect populations over the long term.
3. **(Golden Eagle):** Identify areas of high concentrations of golden eagles for increased protection from human disturbance.

4. **(Golden Eagle):** Conduct or support studies of prey species importance and abundance. Relate known prey population levels to golden eagle populations. Identify and monitor known prey for golden eagle populations.
5. **(Golden Eagle):** Avoid impacts on golden eagles from March 15 to August 31, in keeping with the Bald and Golden Eagle Protection Act and in accordance with USFWS guidance.
6. **(Golden Eagle):** Apply NSO stipulations to fluid mineral leasing and development (see **Appendix E**) within 0.5 miles of golden eagle nests.
7. **(Flora) (Surface-Disturbing Activities):** For BLM-authorized surface-disturbing activity in known habitat for special status flora or unique ecosystems:
   - Applicants may be required to conduct a vegetation and special status plant survey, using a BLM-approved protocol. Revise the map of known habitat as new information becomes available.
   - Potentially require authorized activities to have a 98-foot (30-meter) setback from special status flora populations, or other avoidance or mitigation measures, when they are discovered during surveys.

2.3.7 Wildland Fire

Goals:

1. Protect human life and property from wildland fire.
2. Protect and enhance economic and ecological resource values.

Objectives:

1. Improve or maintain habitat for important wildlife, such as moose, caribou, and grouse using wildfire, prescribed fire, and vegetation management.
2. Reduce suppression costs and increase suppression effectiveness through fire and fuels management.
3. Maintain and enhance relationships with partners and the public.
4. Reduce negative effects of environmental change with wildland fire and fuels management.

Actions:

1. Use the principles of active management to facilitate wildfire prevention, suppression, and recovery planning measures designed to protect people, communities, landscapes, and water quality and to mitigate the severe flooding and erosion caused by wildfire.
2. Cooperate and collaborate with other federal, State, Native, and local land managers and with other stakeholder groups to manage wildland fire effectively and efficiently in Alaska in accordance with interagency and BLM plans and agreements.
3. Use good neighbor authority[7] agreements or contracts and pursue long-term land stewardship contracts.

---

[7] A cooperative agreement or contract (including a sole source contract) entered between the Secretary and a Governor to carry out authorized restoration services under Section 8206 of the Agricultural Act of 2014 (PL 113-79).

4. Identify sites needing protection including structures, cultural and paleontological sites, small areas of high resource value, and priority species habitat (as needed). Communicate these values to protection agencies.
5. Use prescribed burning and mechanical and manual fuels treatments to achieve resource objectives, in support of scientific research or in support of BLM cooperators and partners.
6. Allow fire use for resource benefit throughout the planning area, provided conditions are appropriate.
7. Consider multiple incident objectives for individual wildfires, including the protection of human life, communities, and property and the enhancement of ecological resource values, when managing wildfires throughout the planning area. Implement management strategies that consider value, risk, probability of success, and cost.
8. Work with fire management partners to annually review and adjust initial response options as necessary, using the Alaska Interagency Wildland Fire Management Plan.
9. Clearly communicate to the public how fire management policies and practices work to balance the natural role of wildland fire with the protection of human life, communities, and other values.
10. Prevent unauthorized human ignitions through collaborative prevention efforts with interagency partners and other affected groups and individuals.
11. Prioritize fuel treatments to achieve the following:
    - Reduce the risk to human life and inhabited property; the highest priority of fuel treatment would be those communities surrounded by hazardous fuels.
    - Reduce the risk and cost of wildland fire suppression in areas of hazardous fuels buildup, such as critical, full, and modified fire management option areas, where fire suppression historically occurred.
    - Achieve other resource objectives, such as habitat needs.
12. Manage wildland fire in a manner that avoids impacts that damage resources and other values, including the introduction and spread of nonnative and invasive species, introduction of suppression chemicals into waterways, disturbances of erodible soils or ecologically sensitive systems, and the degradation of air quality; use minimum impact suppression techniques wherever possible; repair or mitigate damage that occurs.
13. Prioritize appropriate management for the following: boreal wetlands, alpine tundra, shrublands, riparian and mesic spruce forests when conducting prescribed fires and fuels management.

2.3.8 Cultural Resources

Goals:

1. Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.
2. Seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses by ensuring that all authorizations for land use and resource use will comply with Section 106 of the NHPA.

3. Increase the number of inventoried sites and traditional cultural properties, traditional land uses areas, and place names in the planning area.
4. Promote collaboration and advancement of scientific or cultural knowledge for sites in the planning area.
5. Increase public knowledge and awareness of cultural resources.

Objectives:

1. Increase the number of known sites, traditional cultural properties, traditional land uses, and place names in the planning area through survey and inventory.
2. Maintain NRHP eligibility of significant cultural resources through monitoring and conservation.
3. Protect cultural resource sites from degradation through monitoring and mitigation to reduce impacts resulting from public access.
4. Assess the impacts of climate change and protect cultural resources from natural degradation.
5. Foster research and collaboration through partnerships with other agencies, Tribes, and academic institutions.
6. Increase general knowledge of cultural resources in the planning area through outreach, interpretation, and education.
7. Assign cultural resources to uses and assess and establish thresholds for determining cultural property significance.

Actions:

1. Prioritize proactive cultural resources surveys in the following:
    - Areas of development or high traffic, including all-terrain vehicle/OHV trails, recreation sites, campgrounds, boat launches, or similar areas.
    - Areas of high mineral potential or mining claims.
    - Areas threatened by climate change or other natural phenomena, such as thawing permafrost, soil erosion, water erosion, or changes in vegetation cover.
    - Areas threatened by wildland fire.
    - Areas of high potential, where no previous cultural resource inventories have occurred.
2. Stabilize or excavate threatened unique or significant cultural sites.
3. Monitor sites to ensure they are not being adversely impacted.
4. Support partnerships with other federal agencies, State of Alaska, Tribes, and private landowners for documentation, stewardship, and protection of cultural resources.
5. Promote collaboration and advancement of scientific and cultural knowledge through partnerships with other agencies, Tribes, and academic institutions.
6. Increase public awareness of the scientific and cultural value of archaeological sites and traditional cultural places through proactive surveys, oral histories, and public outreach.
7. Continue archaeological management activities associated with the Mesa site under PLO 7823; recommend continuation of the Mesa site withdrawal.

8. Manage cultural resources in a stewardship role for public benefit; the purposes of this program are to analyze the scientific and socio-cultural values of cultural resources, to provide a basis for allocating cultural resources, to make cultural resources an important part of the planning system, and to identify information needed when existing documentation is inadequate to support a reasonable cultural resource-based land use allocation.

9. For authorized activities, attach the following stipulation, updated as needed, to all permits, leases, and ROWs, except those that have already incorporated into the project development phase Section 106 compliance through cultural resources identification and mitigation efforts:
   - Require all operations to be conducted so as not to damage or disturb any historic or archaeological sites and artifacts. The Antiquities Act (1906), Archaeological Resources Protection Act (1979), FLPMA (1976), and general United States property laws and regulations all prohibit the appropriation, injury, or destruction of any historic or prehistoric ruin or monument or any other object of antiquity on lands owned or controlled by the United States (54 U.S.C. 300101 et seq.; 54 U.S.C. 320302; 43 U.S.C. 1733(a); 18 U.S.C. 1361; 18 U.S.C. 641; 43 CFR 8365.1). This includes both prehistoric and historic sites and associated artifacts, including stone tools, modified bone, antler, ivory, or wood material, campfire rings, stone cairns, cabins and other structures and their ruins, mining equipment, and refuse dumps. Should any site be discovered during field operations, require the holder to avoid impacting such materials and to immediately notify the BLM AO and provide global positioning system (GPS) coordinates and photographs of the identified resource.

10. Conduct cultural resource inventories in high priority areas or places that have had no previous inventory.

11. Assess the impacts of climate change on sites that are particularly vulnerable to thawing permafrost or soil erosion, whenever possible, in conjunction with other Section 110 surveys. Excavate significant sites, as time and funding allow.

12. Designate the Galbraith Lake ACEC and Jim River ACEC to protect cultural resources (**Appendix M**).

13. Monitor all NRHP-eligible sites on a regular basis.

14. Recognize the cultural significance of all areas identified as traditional cultural properties by tribal councils, regardless of whether or not they are found eligible for listing on the NRHP. This includes applying the following management to all traditional cultural properties:
    - Consult with tribal councils when considering any land use authorization applications, including special recreation permits, for proposed actions within a traditional cultural property's boundaries.
    - Send a notification letter and written description of any proposed actions to the tribal councils and, minimally, discuss the proposed action with the tribal councils via phone.
    - Allow, minimally, 30 days for the tribal councils to consider the proposed action and to provide proposed mitigation measures and equally consider those mitigation measures in any agency decisions.

15. Nominate eligible historic properties to the NRHP, as time and funding allow.

16. **(Criteria for Cultural Resource Allocation and Allowable Uses):** Assess all recorded cultural resources according to the following six use categories for prehistoric and historic resources:
    - **Scientific use**—This category applies to any cultural property determined to be available for consideration as the subject of scientific or historical study at the present time, using currently available research techniques. Study includes methods that could result in the property's physical alteration or destruction. Due to the limited amount of archaeological research that has occurred in interior Alaska, relative to the landmass, all cultural properties in the planning area are allocated to scientific use but may be designated as conservation for future use or traditional use through consultation with Tribes, the SHPO, or other entities. Authorized study methods would include standard or newly developed techniques that may involve destructive analysis.
    - **Public use**—This category may be applied to any cultural property found to be appropriate for use as an interpretive exhibit in place, or for related educational and recreational uses by members of the general public. Sites designated for public use in the planning area are any sites that could significantly contribute to the knowledge and understanding of the history and culture of the region. No sites in the decision area are designated for public use at this time.
    - **Conservation for future use**—This category is reserved for any unusual cultural property that is not currently available for consideration as the subject of scientific or historical study that would result in its physical alteration. Its lack of consideration would be because of scarcity, a research potential that surpasses the current state of the art, singular historic importance, cultural importance, architectural interest, or comparable reasons. No sites in the decision area are designated for conservation for future use at this time.
    - **Experimental use**—This category may be applied to a cultural property judged well-suited for controlled experimental study, to be conducted by the BLM or others concerned with the techniques of managing cultural properties. This could result in the property's alteration, possibly including loss of integrity and destruction of physical elements. No properties in the decision area have been designated as experimental use.
    - **Traditional use**—This category is to be applied to any cultural resource perceived by a specified social or cultural group as important in maintaining their cultural identity, heritage, or well-being. Cultural properties assigned to this category are to be managed in ways that recognize the importance ascribed to them and seek to accommodate their continuing traditional use. No properties in the decision area have been identified as traditional use, but they may be identified in the future through consultation with Tribes, the SHPO, or other entities.
    - **Discharged from management**—This category is assigned to cultural properties that have no remaining identifiable use. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses. Sites allocated as discharged from management have been determined to be ineligible for listing on the NRHP and are completely physically removed from the original location. No properties in the decision area have been identified for discharge from management.

2.3.9 Paleontological Resources

Goal:

1. Identify, preserve, and protect significant paleontological resources and ensure that they are available to present and future generations for appropriate uses, such as scientific study and public education.

Objectives:

1. Inventory, identify, record, evaluate, manage, and protect significant paleontological resources for scientific research, education, and public outreach.
2. Protect significant paleontological resources from surface-disturbing activities by focusing any inventory on high probability paleontological areas.
3. Develop education/interpretation related to important paleontological resources.
4. Develop an updated potential fossil yield classification system for the planning area.
5. Complete and maintain an inventory of fossil localities and monitor known occurrences of any significant paleontological resources that are under possible threat from natural or human causes.

Actions:

1. Prioritize for BLM survey all potential fossil yield classification areas classified as 4 or 5 (high and very high potential).
2. Prioritize fuels and vegetation management projects in areas with known vertebrate fossils or high potential fossil yield classification values for vertebrate fossils.
3. Promote collaborative research by authorizing the collection, removal, excavation, or casting of vertebrate fossils in the decision area, including dinosaur tracks, by qualified researchers.
4. Evaluate lands identified for disposal to determine whether significant fossils would be removed from federal ownership, the impacts of such removal, and any applicable mitigation strategies.
5. Promote the stewardship, conservation, and appreciation of paleontological resources through educational and public outreach programs.

2.3.10 Visual Resources

Goal:

1. Assign, maintain, and manage visual resources by applying BMPs to all surface-disturbing activities, to manage for visual characteristics in all VRM classes.

Objectives:

1. **VRM Class I**—Preservation of the landscape. This class provides for natural ecological changes; it does not, however, preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
2. **VRM Class II**—Retain the existing character of the landscape. Activities in or modifications of the environment should not be evident or attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

3. **VRM Class III**—Partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not detract from the existing landscape.
4. **VRM Class IV**—Provide for management activities that require major modification of the character of the landscape. Changes may attract attention and be dominant landscape features but should reflect the basic elements of the existing landscape. A Class IV rating is generally reserved for areas where the visual intrusions dominate the viewshed but are in character with the landscape.
5. Maintain or enhance existing visual resource inventory classes.
6. Maintain or enhance viewsheds from high visitation travel routes and travel routes used by village communities, including rivers.
7. Maintain or enhance viewsheds from all adjacent NPS lands, USFWS lands, and BLM and State of Alaska special designation areas.
8. Manage authorized activities to reduce alteration of natural night sky light and maintain dark, clear skies for aurora borealis viewing, stargazing, and other nighttime activities.

Actions:

1. Allocate BLM-managed lands to the following VRM classifications (**Map 2.3**, Alternative E: Visual Resource Management, **Appendix A**):

Allocations:

1. **VRM Class I**: 260,000 acres
    - CAMA WSA
    - Nigu-Iteriak River ERMA
2. **VRM Class II**: 1,215,000 acres
    - Sukakpak Region SRMA
    - Dalton Corridor SRMA
    - Dalton Corridor BCA
    - Brooks Range North SRMA
3. **VRM Class III**: 913,000 acres
    - Jim River ACEC
    - Central Dalton SRMA
4. **VRM Class IV**: 10,876,000 acres
    - All other BLM-managed lands

2.3.11 Lands with Wilderness Characteristics

Goal:

1. On lands managed for wilderness characteristics, maintain characteristics of size, naturalness, solitude, and outstanding opportunities for primitive and unconfined recreation while emphasizing other multiple uses as a priority over protecting wilderness characteristics.

Objective:

1. Consider the following ANILCA-specified uses to be compatible with LWCs in Alaska:
    - Public use cabins and shelters
    - Snowmachines with adequate snow cover
    - Airplane use, including primitive landing areas.
    - Motorboat use
    - Temporary structures/equipment for hunting, fishing, and trapping

Actions:

1. Maintain an inventory of all lands that possess wilderness characteristics.
2. Manage 12,721,000 acres with wilderness characteristics to emphasize other multiple uses as a priority over protecting wilderness characteristics (**Map 2.4**, Alternative E: Lands with Wilderness Characteristics**, Appendix A**).

2.4 Management Decisions: Resource Uses

2.4.1 Forestry

Goals:

1. Manage to sustain forest health.
2. Manage to provide sustained yield of firewood, house logs, and other forest products.
3. Maintain ecosystem function by managing for a diverse species assemblage capable of providing ecosystem services such as carbon storage and water and nutrient flows.

Objectives:

1. Provide woody biomass consistent with other resource uses, as part of an ecologically healthy system and consistent with the principles of multiple use.
2. Provide forest resources to meet subsistence and personal use needs.
3. Address forest health issues, as needed.
4. Allow for commercial timber harvest where demand exists and is consistent with other resource objectives.

Actions:

1. Harvest would be in compliance with the Alaska Forest Resources and Practices Act BMPs, Alaska Statute 41.17.119: Minimum Riparian Standards for Other Public Land, and any other applicable regulations established by the State Forester pursuant to Alaska Statute 41.17.115. Harvest may include the following:
    - Subsistence harvest (harvest by qualified subsistence users for purposes allowable under ANILCA)
    - Commercial harvest (any harvest, other than subsistence harvest, for the purpose of sale or barter of forest products)
    - ROW harvest (authorized harvest for the purposes of clearing a ROW authorized under regulations at 43 CFR 2800; ROW harvest is a category of commercial harvest)

- Personal use (harvest for the purpose of removing and using the forest products, such as for firewood; personal use harvest requires an authorization and is generally limited to standing dead or down wood)
- Research harvest (harvest of timber for research or scientific purposes)
- Fuels management harvest (harvest of timber for the purpose of managing fuels to mitigate wildland fire risk)
- Incidental timber harvest (collection of small amounts of forest products for use in campfires on public lands, in accordance with 43 CFR 8365.1-5(b))
- Timber harvest (used with no qualifier means all the above)

2. Any commercial harvest within the 100-year floodplain must demonstrate that it would meet aquatic, riparian, and floodplain objectives.
3. Unless specifically authorized, no green timber may be cut within 300 feet of a highway or public road.
4. If monitoring indicates any intensive firewood use areas, where demand may exceed supply, then develop a forestry activity management plan.
5. Allow harvest of special forest products for personal use on all lands, except in CAMA.

Allocations:

1. On 957,000 acres, prohibit commercial timber harvest and prohibit non-subsistence collecting of live vegetation (subsistence use still requires an authorization; **Map 2.5**, Alternative E: Forestry, **Appendix A**) in the following areas:
    - CAMA WSA
    - Within 50 feet of a water body

2.4.2 Lands and Realty

Goals:

1. **(Land Tenure and Withdrawals)** (**Appendix I**, Land Tenure**):** Retain public lands with high resource values to the extent practicable; adjust land to consolidate public land holdings, acquire lands with high public resource values, and meet public and community needs.
2. **(Land Tenure and Withdrawals):** Make recommendations on whether withdrawals should be retained.
3. **(Land Tenure and Withdrawals):** Complete the conveyance of lands pursuant to legislative mandates. These mandates include the Alaska Statehood Act, ANCSA, and the 1906 Native Allotment Act, and the Dingell Act (Public Law 116-9).
4. **(Land Use Authorizations):** Meet public needs for land use authorizations, such as permits, leases, easements, recreation and public purpose lease or patents, and ROWs—including those necessary for communication sites and development of alternative energy sources—while minimizing adverse impacts on resource values.
5. **(Land Use Authorizations):** Minimize the proliferation of linear land use authorizations outside of the Utility Corridor by emphasizing suitable colocations (e.g., access to mining claims, private parcels, and other resources or utilities, or other authorized commercial activities).

Objectives:

1. **(Land Tenure and Withdrawals):** Once conveyances to the State of Alaska and ANCSA corporations are complete, to the extent practicable, ensure landownership patterns in the planning area result in efficient and effective management of the public lands that minimize the number of small, isolated BLM parcels that are difficult to manage.
2. **(Land Tenure and Withdrawals):** Update public land records when the Secretary acts on recommendations to fully or partially revoke withdrawals.
3. **(Land Tenure and Withdrawals):** Consolidate land management to sustain natural resources necessary for meeting subsistence needs.
4. **(Land Tenure and Withdrawals):** Attain a BLM land pattern that blends multiple resource values and brings about better manageability to the extent practicable.
5. **(Land Tenure and Withdrawals):** Land exchanges would be considered at the implementation level if it benefits public interests. Exchanges would focus on efficient management of public lands and objectives including protection of fish and wildlife habitats, cultural resources, wilderness, and aesthetic values, enhancing recreational opportunities, and community expansion. Exchanges generally would not be pursued until final State and Native entitlement is reached.
6. **(Land Use Authorizations):** Allow the Utility Corridor to continue to support existing and future transportation and utility projects, while maintaining visual, recreational, cultural, and ecological values, including connectivity between conservation units adjacent to the corridor, to the extent practicable.
7. **(Land Use Authorizations):** Continue managing ANCSA 17(b) easements that have been reserved in patents or interim conveyances to ANCSA Corporations for access to public lands, in accordance with IM-AK 2007-037, ANCSA 17(b) Easement Management Handbook (including any future instruction memorandum updates or policy replacements).
8. **(Land Use Authorizations):** Identify ROW corridors that promote appropriate infrastructure development.
9. **(Land Use Authorizations):** Within the utility corridor and to the extent practicable, establish development nodes to minimize sprawl and concentrate development along roadways with particular emphasis on intersections.
10. **(Land Use Authorizations):** Identify ROW exclusion and avoidance areas needed to protect resources. ROW exclusion areas are areas where land use authorizations would be prohibited. ROW avoidance areas are areas that would be available for land use authorizations that may entail special stipulations or consideration of other site-specific alternatives to protect specific resources. The BLM will recognize and protect valid existing rights.
11. **(Land Use Authorizations):** Unless specific lands are designated as ROW exclusion areas, ACEC designations would not prevent or preclude authorized access to adjacent lands not managed by the BLM. Additionally, ACEC designations would not prevent any ROWs guaranteed under section 1323(b) of ANILCA.
12. **(Land Use Authorizations):** ROW avoidance areas within ACECs are areas that would be available for authorized activities that may entail special stipulations or consideration of other site-specific alternatives to protect identified relevant and important values for the subject

ACEC(s) involved. The BLM would work with any project proponent to design a project plan in ROW avoidance areas that meet the proponent's needs and protects relevant and important ACEC values.

Actions:

1. **(Land Tenure and Withdrawals):** 1,304,000 acres of Department of Defense lands are withdrawn through Executive Order, PLO, and Public Law. No changes are recommended to these Department of Defense withdrawals. All prescriptions listed below apply where the BLM has authority.
2. **(Land Tenure and Withdrawals):** The lands that meet the criteria to be retained, acquired, or disposed of are identified as Zone 1, 2, or 3, in **Appendix I**. These decisions have no effect on the ongoing State of Alaska land conveyance process or effective selections.
    - Lands in Zone 1 would be retained under BLM management; inholdings would be considered for acquisition on a willing seller basis (ACECs, RNAs, designated important habitat, high priority riparian habitat, lands managed for wilderness character, BCAs, and recreation assets, including SRMAs and ERMAs).
    - Lands in Zone 2 would generally be retained but would be available for acquisition or exchange, whichever is appropriate, to enhance public resource values, improve management capabilities, or reduce the potential for land use conflict.
    - Lands in Zone 3 meet the criteria for lands available for disposal or exchange (all Fairbanks Subunit parcels).
    - Lands in Zones 2 and 3 would be reassigned to Zone 1, if the USFWS includes them in future designations of important habitat under the Endangered Species Act of 1973.
3. **(Land Tenure and Withdrawals):** The BLM would consider mutually benefiting public interest land exchanges. Exchanges are authorized in Alaska by FLPMA Section 206, Section 22(f) of ANCSA, and Section 1302(h) of ANILCA. When considering public interest, the BLM would consider efficient management of public lands and securing resource management objectives. Reserved federal interests in split-estate lands anywhere in the planning area may be considered for conveyance out of federal ownership.
4. **(Land Tenure and Withdrawals):** When and where appropriate, acquire lands by purchase, exchange, or donation, from willing owners/sellers to further the programs of the Secretary of the Interior. The BLM may acquire less than fee title to property if management goals can be achieved by doing so (acquisition of a conservation easement is an example of acquiring less than fee title). Consider acquiring land from willing sellers in Zone 1 areas (inholdings) and in Zone 2 areas for consolidation of land patterns.
5. **(Land Tenure and Withdrawals):** Recreation and Public Purposes (R&PP) Act (43 U.S.C. 869 et seq.)—Consider R&PP disposals on Zone 2 and 3 lands throughout the planning area, in accordance with the following:
    - Selected lands that meet the criteria for disposal under the R&PP Act would have to be fully adjudicated before the BLM would entertain an R&PP application. If these selections were rejected or relinquished within the life of this plan, then the BLM could accept an application under the R&PP Act.

- In most instances, the BLM would first lease lands under the R&PP Act and would convey the lands only after the project is constructed, in compliance with an approved development and management plan; tracts proposed as sanitary landfills would not be leased, only sold.

6. **(Land Tenure and Withdrawals):** R&PP Act patents in which the United States has reserved a reversionary interest would be evaluated and addressed at the implementation level, based on BLM management needs. The United States may renounce the reversionary interest on any patents issued with this limited reversion clause if the AO determines that the use of the lands were for solid waste disposal (sanitary landfill) or any other use that results in the disposal, placement, or release of any hazardous substance, such as a wastewater treatment facility, a shooting range, or a firefighting training facility, in accordance with 43 CFR 2743.
7. **(Land Tenure and Withdrawals):** Acquire private parcels in Zone 1 lands on a willing seller basis or through exchange.
8. **(Land Tenure and Withdrawals):** Consider exchange of isolated parcels surrounded by State or Native corporation lands for high priority parcels in or next to lands identified as priority areas for LWC.
9. **(Land Tenure and Withdrawals) (Disposal Criteria):** 67,410 acres (**Map 2.6**, Alternative E: Land Tenure, **Appendix A**) are identified for potential disposal based on the following criteria (**Appendix I**):
   - Isolated parcels (e.g., those near Fairbanks) typically smaller than a township
   - An acquired tract that no longer serves the purpose for which it was acquired.
   - A tract whose disposal would serve the public objectives, such as expansion of communities and economic development, or an R&PP Act, or other lands action with a reversion clause or any other reversionary interests.
   - A tract of land that, because of its location or other characteristics, is difficult or uneconomical to manage and is not suitable for management by another federal agency.
   - Where disposal would promote management consolidation and ownership
   - A tract of land that does not provide the only practicable source of recreational access to other public lands.
   - Consider minor adjustments around CSU boundaries allowed under ANILCA, 103(b) (23,000-acre limit).
10. **(Land Use Authorizations):** Provide access to non-federally owned lands, adequate to ensure the landowner's reasonable use and enjoyment of such lands, as required by Section 1323(b) of ANILCA; access across lands within ACECs (not present for all alternatives) is not precluded by ACEC designation, unless the ACEC is designated as a ROW exclusion area. Evaluate proposals for access across ACEC lands to private lands for their environmental impacts.
11. **(Land Use Authorizations):** Provide access to inholdings in CSUs and WSAs, as required by ANILCA Section 1110(a) and 43 CFR 36.
12. **(Land Use Authorizations):** Consider proposed transportation and utility projects affecting CSUs (e.g., INHT), pursuant to the Title XI TUS Process in ANILCA and 43 CFR 36.
13. **(Land Use Authorizations):** Consider applications for renewable energy projects.

14. **(Land Use Authorizations):** Consider land use authorizations, including but not limited to FLPMA ROW grants, leases, and permits throughout the planning area, except where prohibited by law or PLOs:
    - Consider proposals for commercial use authorizations of cabins (trapping).
15. **(Land Use Authorizations):** Make lands available to federal and state agencies and research organizations for needed administrative and support facilities, where environmentally feasible and compatible with management objectives.
16. **(Land Use Authorizations):** Grant land use authorizations on a case-by-case basis. Locate near other development or on already disturbed areas, whenever practical and reasonable to do so.
17. **(Land Use Authorizations) (Maintenance Camps):** Allow State road maintenance camps.
18. **(Land Use Authorizations) (Communication Site Development):** Allow for additional communication site development on public land, to support resource development and ancillary needs.
19. **(Land Use Authorizations) (Provisions for Wildlife/Soil, Water, and Air Resources):** Require that linear project ROWs incorporate design features or stipulations to mitigate impacts on caribou passage in migration corridors for all priority wildlife species.
20. **(Land Use Authorizations) (Provisions for Wildlife/Soil, Water, and Air Resources):** Note: ROW avoidance management actions that overlap the narrow band of BLM-managed lands that extends toward Venetie are a result of ACEC-related management.
21. **(Land Use Authorizations):** Decisions pursuant to projects proposed under the State of Alaska's Roads to Resources Initiative would be addressed in future ROW decisions.
22. **(Land Use Authorizations):** If the BLM were to receive an application for a ROW, pursuant to Section 1431(j) of ANILCA, the BLM would work with the proponent to process the application consistent with applicable law.
23. **(Withdrawals):** Retain all BLM administrative site withdrawals.
24. **(Withdrawals):** Retain other federal agency withdrawals, for example, for the National Oceanic and Atmospheric Administration, the military, the General Services Administration, and the Federal Aviation Administration, until relinquished by the agency; then revoke them, as appropriate, in accordance with applicable laws and regulations.
25. **(Withdrawals):** Recommend retaining PLO 5150 which withdrew and reserved the public lands as a utility and transportation corridor within the meaning of Section 17(c) of ANCSA, in aid of programs for the United States government and the State of Alaska. The PLO identifies an outer corridor and an inner corridor. The inner corridor does not allow metalliferous minerals or any appropriation. The outer corridor is withdrawn from appropriation (**Map 2.7**, Alternative E: Public Land Order Withdrawals; Fairbanks Subunit, **Map 2.8**, Alternative E: Public Land Order Withdrawals; Middle Yukon Drainages Subunit, and **Map 2.9**, Alternative E: Public Land Order Withdrawals; Utility Corridor Subunit, **Appendix A**).
26. **(Withdrawals):** Recommend the Secretary revoke in part 11,178,000 acres of ANCSA 17(d)(1) withdrawals for the limited purpose of allowing in the selection of Native allotments in compliance with the Dingell Act (**Map 2.10**, Alternative E: Recommend Partial Revocation of

ANCSA 17(d)(1) Withdrawals for Allotment Selection by Alaska Native Vietnam-era Veterans). This includes recommending partial revocations on all the following PLOs:

- PLO 5169
- PLO 5173
- PLO 5179
- PLO 5180
- PLO 5184
- PLO 5186
- PLO 5242

27. **(Administrative Utility Corridors):** Colocate new linear ROWs with existing infrastructure, to the extent practical, particularly within identified potential corridors.
    - Any ROW proposal within these potential corridors would need to be analyzed through a project-specific NEPA process. Concurrent with that process, the BLM may consider designating a transportation and utility corridor consistent with the direction in 43 C.F.R. 2802.11.
28. **(Administrative Utility Corridors):** The following potential utility and transportation corridors are identified as areas in which to encourage colocation:
    - Ambler (Dalton East–West Corridor) 5-mile corridor
    - Umiat Corridor (North Slope East–West Corridor; the block of State-selected lands to the west of the Toolik Lake RNA)
    - Dalton Highway Corridor

Allocations:

1. **(Land Use Authorizations):** Manage 317,000 acres as ROW exclusion areas (**Map 2.11**, Alternative E: Right-of-Way Allocations, **Appendix A**). This includes:
    - CAMA WSA
    - Hot Springs
        - Kanuti
        - Ishtalitna
        - Ray River
        - Kilo
    - ACECs
        - Alatna River (5,000 acres)
        - Within the stream order based 100-year floodplain buffer areas in Sulukna River (51,000)
2. **(Land Use Authorizations):** Manage 1,536,000 acres as ROW avoidance areas (**Map 2.11**, **Appendix A**). This includes:
    - DSHAs (see **Appendix H** for specifications)
    - 160-acre square centered on hot springs
    - 100-year floodplain of high-value watersheds
    - Venetie arm
    - Ray Mountans and Galena Mountain Core Caribou Ranges
    - Pingo clusters south of Lake Todatonten and adjacent to Kanuti Hot Springs
    - ACECs:
        - Accomplishment Creek (41,000 acres)

- 100-year floodplain portions of certain ACECs:
  - Hogatza River Tributaries (55,000 acres)
  - Huslia River (9,000 acres)
  - Indian River (17,000 acres)
  - Jim River (30,000 acres)
  - Klikhtentotzna Creek (18,000 acres)
  - Sethkokna River (34,000 acres)
  - South Fork Koyukuk River (44,000 acres)
  - Upper Teedriinjik (Chandalar) River (31,000 acres)
  - Wheeler Creek (16,000 acres)

2.4.3 Energy and Minerals

Fluid Leasable Minerals Goals:

1. Make the public lands and federal mineral estate available for orderly and efficient exploration, development, and production of fluid leasable mineral resources (includes oil, natural gas, tar sands, coal bed natural gas, and geothermal steam), unless closure or other administrative action is necessary to protect other resource values.
2. Where authorizing fluid leasable mineral actions, to the extent possible, ensure that objectives to protect other resource values in the planning area are met.

Fluid Leasable Minerals Objective:

1. If demand arises, provide opportunities for environmentally responsible exploration and development of leasable mineral and energy resources, subject to appropriate laws, regulations, and policies.

Fluid Leasable Minerals Actions:

1. Apply the following controlled surface use stipulation to fluid mineral leases:
   - The operator would construct drill pads at least 500 feet and compressor stations at least 1,500 feet from occupied structures.
   - Prior to final abandonment, require that land used for fluid mineral infrastructure—including but not limited to well pads, production facilities, access roads, and airstrips—be reclaimed to ensure eventual return of ecosystem function.
   - The BLM may grant exceptions to satisfy stated environmental purposes or community needs.
2. While no areas are mapped as such, a controlled surface use stipulation would be applied on slopes greater than 35 percent (**Appendix E**).
3. Manage areas open to fluid mineral leasing as subject to timing limitations within 0.5 miles of any known priority raptor nests, from April 15 through August 15 (from March 15 through July 20 for gyrfalcon nests) (see **Appendix E).**

Fluid Leasable Minerals Allocations:

1. Manage 12,147,000 acres as withdrawn from fluid mineral leasing, per ANCSA 17(d)(1) withdrawals and PLO 5150.
2. Manage 845,000 acres as open to fluid mineral leasing (**Map 2.12**, Alternative E: Fluid Mineral Leasing, **Appendix A).**
3. The following areas (7,000 acres) are open to fluid mineral leasing, subject to NSO (**Map 2.13**, Alternative E: Fluid Mineral Leasing, No Surface Occupancy, **Appendix A**, and see **Appendix E**):
   - Within 160-acre square centered on hot springs, with an exception for geothermal leases or wells
   - Within 0.25 miles of lentic areas
   - 100-year floodplain not otherwise closed
   - DSHAs
   - Within 0.5 miles of active golden eagle nests
   - Within the following ACECs where not already withdrawn:
     - Accomplishment Creek (41,000 acres)
     - Galbraith Lake (53,000 acres)
     - Mentanontli River/Lake Todatonten (20,000 acres)
     - Midnight Dome/Kalhabuk (10,000 acres)
     - Nugget Creek (3,000 acres)
     - Poss Mountain (25,000 acres)
     - Snowden Mountain (50,000 acres)
     - West Fork Atigun (33,000 acres)
   - Within the stream order-based 100-year floodplain buffer areas of the following ACECs:
     - Hogatza River Tributaries (55,000 acres)
     - Huslia River (9,000 acres)
     - Indian River (17,000 acres)
     - Jim River (30,000 acres)
     - Klikhtentotzna Creek (18,000 acres)
     - Sethkokna River (34,000 acres)
     - South Fork Koyukuk River (44,000 acres)
     - Tozitna River (85,000 acres)
     - Upper Teedriinjik (Chandalar) River (31,000 acres)
     - Wheeler Creek (16,000 acres)
4. The following areas (53,000 acres) are closed to fluid mineral leasing, due to resource concerns (**Map 2.12**, **Appendix A**), and see Proposed RMP/Final EIS, **Appendix J**.
   - Within 100-year floodplain of high-value watersheds
   - Ray Mountains Core Caribou Range
   - CAMA WSA
   - Within the Alatna River ACEC
   - Within the stream order-based 100-year floodplain buffer areas of the Sulukna River ACEC

Nonenergy Solid Leasable Minerals Goal:

1. Provide for the extraction of solid leasable minerals to meet public national, regional, and local demand, while minimizing adverse impacts on other resources.

Nonenergy Solid Leasable Minerals Objective:

1. If demand arises, provide opportunities for environmentally responsible exploration and development of leasable mineral and energy resources, subject to appropriate laws, regulations, and policies.

Nonenergy Solid Leasable Minerals Actions:

1. Before they conduct any operations for nonenergy solid leasable minerals, operators would prepare and submit a mining plan, a reclamation plan, and a monitoring plan, pursuant to 43 CFR 3507 and 3592. As part of these plans, operators would generally be expected to submit the following in conjunction with the current regulations and at the discretion of the BLM AO:
   - Annual water quality monitoring report, as required by the Alaska Department of Environmental Conservation
   - Annual invasive species inventory
   - Annual status report of reclamation activities and progress
2. Also, operators would be required to take the following actions:
   - Designate a specific GPS photo point that is clearly marked on the ground and in an area that will not be mined through; submit photos of the operation from this point to the BLM in the end of year report; these photos would be taken in the spring and fall of each mining season.
   - Describe how concurrent reclamation will be implemented.
   - In locations where topography and water volume allow, operations are required to be a zero-discharge facility, unless authorized by the BLM due to site-specific considerations or restraints that would make zero discharge economically or technically infeasible.
3. All operators would comply with reclamation requirements described below and those outlined in **Appendix K**:
   - Soil and vegetation reclamation
     - When practicable, mine operators must remove, segregate, and preserve all topsoil or other suitable growth media to minimize erosion and sustain revegetation when reclamation begins. Soil must be stockpiled to preserve soil viability and promote concurrent reclamation.
     - When practicable, mine operators must revegetate disturbed lands by establishing a stable and long-lasting vegetation cover that is self-sustaining. Reclamation and revegetation must demonstrate that they are trending toward conditions that would provide for the rehabilitation of wildlife habitat. The BLM may develop site-specific revegetation criteria, based on site-specific analysis, as part of the baseline condition measurements.
     - Mine operators will take all reasonable steps to minimize the introduction of noxious weeds and to limit any existing infestations through the use native species, when available, to the extent technically feasible. Where site conditions demonstrate revegetation is not achievable, then other techniques to minimize erosion and stabilize the project area must be used, subject to BLM approval.
   - Riparian and stream disturbance/reclamation and fisheries rehabilitation
     - Refer to the reclamation standards found in **Appendix K**

Nonenergy Solid Leasable Minerals Allocations:

1. Manage 12,147,000 acres as withdrawn from nonenergy solid mineral leasing, per ANCSA 17(d)(1) withdrawals and PLO 5150.
2. Manage 876,000 acres as open to nonenergy solid mineral leasing (**Map 2.14**, **Alternative E:** Nonenergy Solid Leasable Minerals, **Appendix A**)
3. Manage the following areas where not already withdrawn (22,000 acres) as closed to nonenergy solid mineral leasing (**Map 2.14**, **Appendix A**):
    - CAMA WSA
    - 160-acre square centered on hot springs
    - Ray Mountains Core Caribou Range (where lands not conveyed)
    - DSHAs
    - ACECs
        - Alatna River
        - Nugget Creek
        - West Fork Atigun
    - Within the stream order-based 100-year floodplain buffer areas of Sulukna River ACEC
    - Naturally occurring asbestos sites

Locatable Minerals Goals:

1. Provide land use opportunities contributing to economic benefits, while protecting or minimizing adverse impacts on other resources.
2. Process all plans and notices in accordance with 43 CFR 3809 and 3715, with a focus on quality product delivery to applicants, within a reasonable time frame, to support Alaska's unique and seasonally dependent mining industry.

Locatable Minerals Objectives:

1. Require and provide guidance regarding plans and notices that have sufficient quality and detail to process in a timely manner.
2. Ensure adequate and timely reclamation of mine sites, both placer and hard rock, to comply with laws, regulations, and BLM policy.

Locatable Minerals Actions:

1. Plan-level operations will include the following as part of their monitoring plan, per 43 CFR 3809.401. Notice-level operations could include the following, at the AO's discretion, as part of compliance with 43 CFR 3809.301:
    - A copy of the annual water quality monitoring report, if necessary, as required by the Alaska Department of Environmental Conservation annual invasive species inventory.
    - Based on site conditions when invasive species are identified, establish an annual report to record progress to monitor and control invasive species at the mine site in coordination with BLM staff.
    - A copy of the annual status report of reclamation activities and progress as is required by the Alaska Department of Natural Resources Application for Permits to Mine in Alaska Annual Reclamation Statement.
    - Designation of a specific GPS photo point that is clearly marked on the ground and in an area that will not be mined through. Overview photos of the entire operation will be taken from

this point in the spring and fall of each mining season and submitted to the BLM in the end of year reclamation report.

2. Exploration and surface mining operations will be required to take the following actions:
    - Describe how concurrent reclamation will be implemented.
    - All lode/hard rock tailings ponds that retain deleterious material will be double-lined and will incorporate sensors and best management/industry practices and standards, including backup/alternative water treatment systems that will allow controlled discharge of the treated effluent to avoid overtopping or uncontrolled release of the material/water to the environment.
    - All tailings dam operators that are required to submit a third-party engineering stability/measurement report to meet the State of Alaska Dam Safety Control Criteria will submit a copy of the report to the BLM by September 30 of every other year.

3. All notice and plan placer operators will comply with reclamation requirements described below and those outlined in **Appendix K**:
    - Soil and vegetation reclamation
        - When practicable, mine operators must remove, segregate, and preserve all topsoil or other suitable growth media to minimize erosion and sustain revegetation when reclamation begins. Soil must be stockpiled to preserve soil viability and promote concurrent reclamation.
        - When practicable, mine operators must revegetate disturbed lands by establishing a stable and long-lasting vegetation cover that is self-sustaining. Reclamation and revegetation must demonstrate that they are trending toward conditions that will provide for the rehabilitation of wildlife habitat. The BLM may develop site-specific revegetation criteria, based on site-specific analysis, as part of the baseline condition measurements.
        - Mine operators will take all reasonable steps to minimize the introduction of noxious weeds and to limit any existing infestations using native species, when available, to the extent technically feasible. Where site conditions demonstrate revegetation is not achievable, then other techniques to minimize erosion and stabilize the project area, subject to BLM approval, must be used.
    - Riparian and stream disturbance/reclamation and fisheries rehabilitation.
        - Refer to the reclamation standards found in **Appendix K.**

4. All operators have the option to use the Alaska Statewide Bond Pool, unless excluded by provisions outlined in the BLM-Alaska Department of Natural Resources Bond Pool Agreement.

5. Use and occupancy qualifications for all operations in the planning area will comply with use and occupancy requirements as outlined under 43 CFR 3715.2 and 43 CFR 3715.2-1:
    - Criteria for use and occupancy:
        - The applicant must demonstrate the need for the cabin or structure commensurate with the level of mining proposed.
        - The applicant must use minimal occupancy facilities.
    - Structures and conditions:
        - Related pit privies must be constructed in accordance with State of Alaska regulations; if a privy cannot meet Alaska regulations, all human waste must be carried out.
        - No permanent structures are allowed under a notice if only surface activities are occurring.

Locatable Minerals Allocations:

1. Approximately 4,755,000 acres are withdrawn from locatable mineral entry, including metalliferous minerals, per ANCSA 17(d)(1) withdrawals and PLO 5150 (Dalton Corridor) (**Map 2.15**, Alternative E: Locatable Minerals, **Appendix A**).
2. Mineral licks (160-acre parcels, aliquot parts) and the Upper Nigu are currently withdrawn from locatable mineral entry.
3. Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.
4. 3,243,000 acres are selected and thus segregated from locatable mineral entry until conveyence or release of the selection (**Map 2.15**, **Appendix A**).
5. 3,330,000 acres are open to location of metalliferous minerals and closed to location of non-metalliferous minerals due to withdrawals.
6. Manage 8,290,000 acres as open to locatable mineral entry (**Map 2.15**, **Appendix A**).
7. Designate recreational mining area for non-mechanized gold panning to Sheep Creek at Mile Post 196.4 Dalton Highway, extending approximately 2.45 miles to the east; and South Fork Koyukuk at Mile Post 156.2 Dalton Highway, extending 1.37 miles to the east of the Highway.
8. The stream-order-based 100-year floodplain buffer areas of Sulukna River ACEC are closed to mineral extraction or collection (i.e., casual use and prospecting).

Mineral Materials Goals:

1. Provide for the extraction of mineral materials to meet public national, regional, and local need, while minimizing adverse impacts on other resources.
2. Provide mineral materials to meet the purposes of the Utility Corridor (e.g., Trans-Alaska Pipeline System and liquid natural gas transport), while minimizing adverse impacts on other resources.

Mineral Materials Objectives:

1. Outside of closed areas, require operators of any new mineral material sites to conduct feasibility studies (e.g., sampling and testing) before they are authorized.
2. Ensure that existing mineral material sites in areas identified as closed under the alternatives remain open and eligible for expansion.
3. Ensure adequate and timely reclamation of mineral material sites to comply with BLM policy and BMPs.

Mineral Materials Actions:

1. Prioritize mineral materials extraction along the Utility Corridor where there are existing or previous mineral materials authorizations.
2. Identify potential areas that could be used to meet future needs of mineral materials along the Utility Corridor where existing authorizations do not exist.

3. Require applications for new mineral material sites to contain exploration data demonstrating that the site meets grade and volume specifications. Do not authorize new mineral material sites without this data.
4. Before authorizing mineral materials extraction, require operators to prepare and submit a mining plan, a reclamation plan, and a monitoring plan, pursuant to 43 CFR 3601.40–44. As part of these plans, operators will incorporate the following:
   - Annual water quality monitoring report, as required by the Alaska Department of Environmental Conservation
   - Annual submission of an invasive species inventory
   - Annual status report of reclamation activities and progress
   - Justification of the need for a new mineral site.
5. Also, operators will be required to take the following actions:
   - Designate a specific GPS photo point that is clearly marked on the ground and in an area that will not be mined through; photos of the operation will be taken from this point and submitted to the BLM in the end of year report; these photos will be taken in the spring and fall of each mining season.
   - Describe how concurrent reclamation will be implemented.
6. In locations where topography and water volume allow, operations are required to be a zero-discharge facility, unless authorized otherwise by the BLM, due to site-specific considerations or restraints that would make zero discharge economically or technically infeasible.
7. All operators will comply with reclamation requirements described below and those outlined in **Appendix K**:
   - Soil and vegetation reclamation
     - When practicable, remove, segregate, and preserve all topsoil or other suitable growth media to minimize erosion and sustain revegetation when reclamation begins. Soil must be stockpiled to preserve soil viability and promote concurrent reclamation.
     - When practicable, revegetate disturbed lands by establishing a stable and long-lasting vegetation cover that is self-sustaining. Reclamation and revegetation must demonstrate that they are trending toward conditions that will provide for the rehabilitation of wildlife habitat. The BLM may develop site-specific revegetation criteria, based on site-specific analysis, as part of the baseline condition measurements.
     - Take all reasonable steps to minimize the introduction of noxious weeds and to limit any existing infestations through the use native species, when available, to the extent technically feasible. Where site conditions demonstrate that revegetation is not achievable, then other techniques to minimize erosion and stabilize the project area, must be used, subject to BLM approval.
   - Riparian and stream disturbance/reclamation and fisheries rehabilitation
     - Refer to the reclamation standards found in **Appendix K.**
8. Existing, authorized sites will remain open for future mineral materials actions, to allow for authorized expansion of currently authorized mineral material sites, and to allow for future needs, except in areas with overriding resource concerns.

9. Encourage extraction of mineral materials from already disturbed sites. Any new site would be approved if judged not in conflict with crucial wildlife habitat, other important resource values, recreation opportunities, or the purposes of the ACECs.

Mineral Materials Allocations:

1. Manage 12,075,000 acres as open to mineral material disposal (**Map 2.16**, Alternative E: Mineral Materials, **Appendix A**).
2. Manage the following areas (970,000 acres) as closed to new mineral material disposal (**Map 2.16**, **Appendix A**):
   - 160-acre square centered on hot springs
   - Galena Mountain Core Caribou Range
   - DSHAs (see **Section 2.3.5**, Wildlife, for exceptions)
   - CAMA WSA
   - Naturally occurring asbestos sites
   - Within the following ACECs:
     - Accomplishment Creek (41,000 acres)
     - Alatna River (5,000 acres)
     - Mentanontli River/Lake Todatonten (20,000 acres)
     - Midnight Dome/Kalhabuk (10,000 acres)
     - Nugget Creek (3,000 acres)
     - Poss Mountain (25,000 acres)
     - Snowden Mountain (50,000 acres)
     - Wheeler Creek (145,000 acres)
   - Within the stream order-based 100-year floodplain buffer areas of the following ACECs, special management applies:
     - Hogatza River Tributaries (55,000 acres)
     - Huslia (9,000 acres)
     - Indian River (17,000 acres)
     - Jim River (30,000 acres)
     - Klikhtentotzna Creek (18,000 acres)
     - Sethkokna River (34,000 acres)
     - South Fork Koyukuk River (44,000 acres)
     - Sulukna River (51,000 acres)
     - Tozitna River (85,000 acres)
     - Upper Teedriinjik (Chandalar) River (31,000 acres)

2.4.4 Recreation and Visitor Services (Including Backcountry Conservation Areas)

Goals:

1. Require that the Recreation and Visitor Services Program supports a diverse array of recreation activities that enhance the quality of life for users.
2. Facilitate greater well-being and economic benefits within communities. Support sustainable economic growth and assist with diversifying and stabilizing local communities through collaboration with community networks of service providers.

3. Promote public health and safety by managing for accessibility of recreation sites and for clean facilities.
4. Provide a variety of dispersed and developed recreation opportunities and experiences, while sustaining the recreation resource base and minimizing resource impacts resulting from recreation. Improve access to appropriate recreation opportunities on public lands, including partnered lands and waters.
5. Maintain a recreational hunting-focused experience for users of the BCA.

Objectives:

1. Ensure that visitors are not exposed to unhealthy and unsafe human-created conditions that have previously been identified, and improve the condition and accessibility, where appropriate, of recreation sites and facilities.
2. Plan for and manage the physical, social, and operational settings in each area and the activities that occur there.
3. While allowing multiple use, manage BCAs for wildlife habitat and backcountry recreation and hunting.

Actions:

1. Limit nonpermitted camping outside of campgrounds to 14 nights per site. Campers must move 5 miles or more after 14 nights.
2. Educate the public and encourage those engaged in nonpermitted activities to adhere to “leave no trace” principles, as described by the Leave No Trace Center for Outdoor Ethics and Tread Lightly.
3. Limit firewood collection for recreational purposes to dead or down trees.
4. Maintain effective separation between domestic animals and Dall sheep (Wild Sheep Working Group 2012; consistent with BLM Manual 1730 [BLM 2016b]). Domestic sheep and goats are prohibited in Dall sheep habitat. To minimize the potential for disease transmission to wildlife, applications for the use of pack animals will be reviewed on a project-specific basis.
5. Consult with applicable tribes on potential special recreation permits in identified traditional cultural property locations.
6. **(SRMA):** The Dalton Highway Corridor Development Nodes managed under the 1991 Recreation Area Management Plan are designated RMZs of the Central Dalton SRMA (Coldfoot and Yukon River Crossing) and are managed according to prescriptions in **Appendix J**, Recreation Management Areas and Backcountry Conservation Areas.
7. **(SRMA):** Designate OHV use as limited in the Sukakpak Region, Brooks Range North, and Central Dalton SRMAs.
8. **(SRMA):** Manage the Sukakpak Region SRMA and Brooks Range North SRMA as VRM Class II
9. **(SRMA):** Manage the Central Dalton SRMA, Dalton Uplands RMZ as VRM Class III
10. **(SRMA):** Manage the following SRMAs as VRM Class IV:
    - Central Dalton SRMA, Coldfoot RMZ
    - Central Dalton SRMA, Yukon River Crossing RMZ

11. **(ERMA):** Manage the following ERMAs as VRM Class I:
    - Nigu-Iteriak River (CAMA)
12. **(BCA):** Establish Dalton Corridor North and South BCA. Manage the BCA for dispersed, wildlife-dependent recreation to achieve objectives described in **Appendix J** (666,000 acres; **Map 2.17,** Alternative E: Recreation; Utility Corridor Subunit, **Appendix A).**
13. **(BCA):** Manage Dalton Corridor BCA as VRM Class II.
14. **(BCA):** Require operators to follow the reclamation standards in **Appendix K** for surface disturbance from mining in the Dalton Corridor BCA.

Allocations:

1. **(SRMA):** Manage the following SRMAs to achieve the objectives described in **Appendix J.** (1,453,000 acres, **Map 2.17**, **Appendix A**):
    - Sukakpak Region (412,000 acres)
    - Central Dalton (904,000 acres)
    - Brooks Range North (137,000 acres)
2. **(ERMA):** Manage the following ERMAs to achieve the objectives in **Appendix J** (136,000 acres, **Map 2.17**, **Appendix A**):
    - Nigu-Iteriak River (CAMA; 136,000 acres)

2.4.5 Travel and Transportation Management

Goals:

1. Manage and provide for motorized, nonmotorized, and mechanized access that would be in balance with resource protection and uses.
2. Support intercommunity access to public lands.

Objectives:

1. Avoid or minimize impacts from travel and OHV activities by managing for soil, water, air, vegetation, and riparian management objectives and indicators.
2. Maintain and improve land health, while promoting responsible use through active travel management; in each TMA, designate a comprehensive travel management system that achieves resource management objectives, provides appropriate, sustainable public and administrative access, communicates with the public about opportunities, and monitors the effects of use.
3. Colocate trails with ROWs, where feasible.

Actions:

1. Allocate all lands in the planning area as limited to motorized travel activities (43 CFR 8340.0-5(g)) (**Map 2.18**, Alternative E: Travel Management Areas, **Appendix A**).
2. Develop specific transportation and travel management plans for each of the following TMAs:
    - Dalton Corridor
    - CAMA lands
    - Middle Yukon/rest of planning area
    - Fairbanks/military lands

3. **(Aircraft Use):** The following areas are subject to requirement that aircraft associated with all BLM-authorized land use activities would be required to fly no lower than a minimum altitude above ground level, unless doing so would endanger human health and safety or be an unsafe flying practice or unless otherwise authorized:
    - 2,000 feet in caribou calving areas from May 1 through June 30
    - 2,000 feet in Dall sheep habitat, from May 1 through June 30
4. Recreational and administrative use of registered unmanned aerial systems (drones) would be allowed, in conformance with Federal Aviation Administration and State regulations; use of unmanned aerial systems for commercial purposes would need an authorization; administrative sites would be closed to takeoffs, landings, and operation of unmanned aerial systems, including the Arctic Interagency Visitor Center, Marion Creek Administrative Site, and 7-Mile Administrative Site, (unless the AO approves federal use of drones over the administrative site).
5. Require adequate snow cover and freeze (6 inches of snow and 12 inches of freeze) to be present for snowmachine use, unless otherwise authorized by the BLM AO.
6. Fixed-wing aircraft use would be allowed, except when otherwise restricted in this plan; associated hand clearing in support of landing areas with, for example, handsaws, axes, and chainsaws, clearing of rocks, downed logs, and brush would be allowed; other associated clearing would require approval from the BLM AO. Fixed-wing aircraft use is authorized in ANILCA CSUs and WSAs (INHT and CAMA WSA).
7. OHVs would be limited to 1,500 pounds curb weight for winter and summer use without a land use authorization. All OHV use (except for subsistence users) would need a land use authorization within 5 miles of the Dalton Highway.
8. **(Dalton Corridor TMA):** With some exceptions, a BLM authorization is required for all OHV use within 5 miles of the Dalton Highway consistent with Alaska Statute 19.40.210.
9. Allow summer OHV use only for subsistence purposes at Nigu-Iteriak within the Middle Yukon/rest of planning area TMA.

12. Manage 106,000 acres as subject to seasonal limitations for OHV travel (closed in summer) (**Map 2.19**, Alternative E: Travel and Transportation Management; Fairbanks Subunit, **Map 2.20**, Alternative E: Travel and Transportation Management; Middle Yukon Drainages Subunit, and **Map 2.21**, Alternative E: Travel and Transportation Management; Utility Corridor Subunit, **Appendix A**. This includes:
    - Naturally occurring asbestos sites
    - Toolik Lake ACEC/RNA
13. Manage 745,000 acres as subject to seasonal limitations for OHV travel (no OHV use from May 1 through June 30) (**Maps 2.19**, **2.20**, and **2.21**, **Appendix A**). This includes:
    - Galena Mountain Core Caribou Range
    - Ray Mountains Core Caribou Range

Compliance with ANILCA:

1. **(ANILCA Provisions):** Develop a step-down transportation and TMP for each of the four TMAs identified under *Allocations* following the decision process described below to address any TMP decisions that are covered by Sections 811,1110, and 1323 of ANILCA. Complete the supplemental rule process after the decision record on the transportation and TMP.

2. **(ANILCA Provisions):** ANILCA provides specific guidance on access for the following:
   - The use of snowmachines, motorboats, and other means of surface transportation traditionally used for subsistence purposes by local residents on all federal public lands (Section 811). See ANILCA Section 102-(3) for the definition of "public lands."
   - The use of snowmachines, motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities and travel to and from villages and homesites, on CSUs, national recreation areas, and national conservation areas, and those public lands designated as wilderness study (Section 1110).
3. **(ANILCA Provisions):** Pursuant to ANILCA Section 811, such uses are subject to reasonable regulation. The NPS and USFWS have developed regulations to implement Section 811 of ANILCA. While the BLM has not developed similar regulations, a process similar to those promulgated by the NPS (36 CFR 13.460) and USFWS (50 CFR 36.12) will be followed.
4. **(ANILCA Provisions):** The BLM will ensure that rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on the public lands (ANILCA Section 811(a)) and would implement restrictions on and closures to snowmachines, motorboats, and other means of surface transportation traditionally employed for subsistence purposes by local rural residents (ANILCA Section 811(b)). This would happen only if the BLM AO determines that such use is causing or is likely to cause an adverse impact on public health and safety, resource protection, protection of historic or scientific values, subsistence uses, conservation of endangered or threatened species, or other purposes, values, and uses for which the lands are being managed under FLPMA or designated by ANILCA. (Closure criteria pursuant to NPS regulations at 36 CFR 13.460(b) and USFWS regulations at 50 CFR 36.12(b)).
5. **(ANILCA Provisions):** The BLM will follow the regulations implementing Section 1110 of ANILCA, as found in 43 CFR 36. It will implement restrictions and closures to the use of snowmachines, motorboats, aircraft, and nonmotorized surface transportation methods (e.g., domestic dogs, horses, and other pack or saddle animals) for traditional activities and travel to and from villages and homesites, only if the BLM AO makes a finding, pursuant to 43 CFR 36.11(h), that such use would be detrimental to the resource values of the area.
6. **(ANILCA Provisions):** Where transportation and travel management planning are deferred, interim decisions are identified. After the Approved RMP and ROD and travel management decision record are signed, the BLM will undertake the following process for both interim and final decisions:
   - Provide notice of proposed decisions in locations reasonably calculated to inform residents in the affected vicinity.
   - Allow a minimum of 60 days for the public comment period on the proposed decisions.
   - Hold public hearings in the affected vicinity and other locations, as deemed appropriate by the BLM.
   - Respond to comments and publish the final decisions.
   - Make the final decisions known by the following methods (at a minimum):
     - Make available those decisions and maps with relevant information for public inspection at the BLM office and at other places convenient to the public in formats reasonably calculated to inform residents in the affected vicinity.
     - Post signs at appropriate sites.
     - List the decisions and show relevant maps in BLM brochures and websites.

7. Provide notice of proposed decisions in locations reasonably calculated to inform residents in the affected vicinity.
8. Allow a minimum of 60 days for the public comment period on the proposed decisions.
9. Hold public hearings in the affected vicinity and other locations, as deemed appropriate by the BLM.
10. Respond to comments and publish the final decisions.
11. Make the final decisions known by the following methods (at a minimum):
    - Make available those decisions and maps with relevant information for public inspection at the BLM office and at other places convenient to the public in formats reasonably calculated to inform residents in the affected vicinity.
    - Post signs at appropriate sites.
    - List the decisions and show relevant maps in BLM brochures and websites.

2.5 Management Decisions: Special Designations

2.5.1 Areas of Critical Environmental Concern

Rationale for the Decision:

The rationale for each ACEC that BLM chose to designate with special management or not designate is explained in **Appendix M**. Alternative E designates 27 percent of the decision area as an ACEC or an RNA, and 3 percent of the decision area are ACECs in the 100-year floodplain.

Goal:

1. Provide special management attention needed to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect human life and safety from natural hazards.

Objective:

1. Maintain the long-term sustainability of the relevant and important values for which the ACEC is designated, as well as the scientific opportunities.

Actions:

1. Require that surface-disturbing activities associated with mineral exploration and development be conducted under an approved plan of operations (43 CFR 3809). Casual uses, as defined in 43 CFR 3809, are exempt from this requirement.
2. Manage 21 ACECs or RNAs (3,611,000 acres) (**Map 2.22,** Alternative E: ACECs/RNAs; Middle Yukon Drainages Subunit and **Map 2.23**, Alternative E: ACECs/RNAs; Utility Corridor Subunit, **Appendix A**; see *Allocations* below)

Within the following ACECs special management actions would apply to stream order-based 100-year floodplain buffers watershed-wide. See *Allocations* for specific management:

1. Hogatza River Tributaries (55,000 acres)
2. Huslia River (9,000 acres)
3. Indian River (17,000 acres)
4. Jim River (30,000 acres)
5. Klikhtentotzna Creek (18,000 acres)
6. Sethkokna River (34,000 acres)
7. South Fork Koyukuk River (44,000 acres)
8. Sulukna River (51,000 acres)
9. Tozitna River (85,000 acres)
10. Upper Teedriinjik (Chandalar) River (31,000 acres)
11. Wheeler Creek (16,000 acres)

These buffer widths based on stream order are as follows:

- First and second order streams: 100 feet on either side of the stream
- Third order streams: 500 feet on either side of the stream
- Fourth and fifth order streams: 1,000 feet on either side of the stream
- Sixth through eighth order streams: 1,500 feet on either side of the stream

Allocations:

1. Accomplishment Creek ACEC (41,000 acres)
    - Designate as an ACEC to protect crucial Dolly Varden overwintering habitat.
    - Closed to mineral materials disposal.
    - NSO for fluid mineral leasing.
    - ROW avoidance area.
    - Subject to valid existing rights, permanent camps and support facilities will be located outside the ACEC except for administrative or scientific purposes.
2. Alatna River ACEC (5,000 acres)
    - Designate as an ACEC to protect crucial whitefish and sheefish spawning habitat, supporting the main subsistence fishery resources for villages in the Upper Koyukuk River.
    - Closed to mineral materials disposal.
    - Closed to fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - ROW exclusion area.
    - Subject to valid existing rights, permanent camps and support facilities would not be located in the 100-year floodplain, except for scientific purposes.

3. Galbraith Lake ACEC (53,000 acres)
   - Designate as an ACEC to protect cultural resources, high scenic values, and crucial Dall sheep habitat, including mineral licks.
   - Proposed ROWs must mitigate wildlife and connectivity corridors impacts.
   - Apply NSO stipulations to fluid mineral leases.
   - Subject to valid existing rights, camps and support facilities in the confines of the ACEC would be temporary and must be removed after their purpose has been accomplished; if cultural resources are discovered, then camps and support facilities must be avoided in these areas.
   - All recreation facilities, such as campgrounds, would be developed to minimize disturbance to protected resources in the ACEC.
4. Hogatza River Tributaries ACEC (221,000 acres)
   - Designate as an ACEC to protect crucial summer chum spawning habitat.
   - The allocations below apply to the 100-year floodplains within the ACEC:
     - Closed to mineral materials disposal.
     - NSO for fluid mineral leasing and development.
     - ROW avoidance area.
     - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.
5. Huslia ACEC (73,000 acres)
   - Designate as an ACEC to protect Chinook, chum, coho, and sockeye salmon and whitefish spawning habitat.
   - Closed to mineral materials disposal.
   - ROW avoidance area.
   - NSO for fluid mineral leasing and development.
   - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.
6. Indian River ACEC (173,000 acres)
   - Designate as an ACEC to protect crucial Chinook and summer chum spawning habitat.
   - The allocations below apply to the 100-year floodplains within the ACEC:
     - Closed to mineral materials disposal.
     - NSO for fluid mineral leasing and development.
     - ROW avoidance area.
     - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.
7. Jim River ACEC (303,000 acres)
   - Designate as an ACEC to protect Dall sheep, crucial Chinook and chum salmon spawning habitat and overwintering habitat for resident fish, soils, water, cultural resources, and scenic values.
   - NSO for fluid mineral leasing and development.
   - ROW avoidance area.
   - Manage as VRM Class III.
8. Klikhtentotzna Creek ACEC (108,000 acres)
   - Designate as an ACEC to protect crucial summer chum salmon spawning habitat.

- The allocations below apply to the 100-year floodplains within the ACEC:
  - Closed to mineral materials disposal.
  - NSO for fluid mineral leasing and development.
  - ROW avoidance area.
  - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.

9. Mentanontli River/Lake Todatonten ACEC (20,000 acres)
   - Designate as an ACEC to protect crucial feeding habitat for humpback whitefish and whitefish migration route.
   - Closed to mineral materials disposal.
   - NSO for fluid mineral leasing and development.
   - ROW avoidance area.
   - Subject to valid existing rights, permanent camps and support facilities would not be located in the 100-year floodplain, except for scientific purposes.
10. Midnight Dome/Kalhabuk ACEC (10,000 acres)
    - Designate as an ACEC to protect Dall sheep habitat.
    - NSO for fluid mineral leasing and development.
    - Closed to mineral materials disposal.
    - Subject to valid existing rights, camps and support facilities would be temporary and must be removed after their purpose has been accomplished.
11. Nugget Creek ACEC (3,000 acres)
    - Designate as an ACEC to protect priority Dall sheep habitat.
    - NSO for fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - Subject to valid existing rights, camps and support facilities would be temporary and must be removed after their purpose has been accomplished.
    - Closed to mineral materials disposal.
12. Poss Mountain ACEC (25,000 acres)
    - Designate as an ACEC to protect priority Dall sheep habitat.
    - NSO for fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - Subject to valid existing rights, camps and support facilities would be temporary and must be removed after their purpose has been accomplished.
13. Sethkokna River ACEC (299,000 acres)
    - Designate as an ACEC to protect crucial Chinook salmon spawning habitat, soil, and water.
    - The allocations below apply to the 100-year floodplains within the ACEC:
      - Closed to mineral materials disposal.
      - NSO for fluid mineral leasing.
      - ROW avoidance area.
      - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.

14. Snowden Mountain ACEC (50,000 acres)
    - Designate as an ACEC to protect priority Dall sheep habitat.
    - NSO for fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - Subject to valid existing rights, camps and support facilities would be temporary and must be removed after their purpose has been accomplished.

15. South Fork Koyukuk River ACEC (415,000 acres)
    - Designate as an ACEC to protect crucial Chinook and summer chum spawning habitat.
    - The allocations below apply to the 100-year floodplains within the ACEC:
        - Closed to mineral materials disposal.
        - NSO for fluid mineral leasing.
        - ROW avoidance area.
        - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.

16. Sulukna River ACEC (398,000 acres)
    - Designate as an ACEC to protect crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species.
    - Closed to mineral materials disposal.
    - Closed to fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - Closed to mineral extraction or collection (i.e., casual use and prospecting)
    - In summer, limit motorized vehicle use to designated routes, trails, or crossings and allow access through the ACEC for vehicles over 1,500 pounds curb weight by authorization.
    - ROW exclusion area.
    - Subject to valid existing rights, permanent camps and support facilities would not be located in the 100-year floodplain.

17. Toolik Lake RNA (106,000 acres)
    - Designate as an RNA to protect high-value research station, supporting more than 14,000 scientific research plots, SSS, and vegetation.
    - All authorized actions would be reviewed to avoid conflict with authorized research projects in the area.
    - Mineral materials would be confined to already-disturbed sites; new sites would be considered only if no other economically feasible alternatives are available.
    - Closed to nonpermitted camping.
    - See Brooks Range North SRMA for camping restrictions.
    - Closed to summer OHV use, except for authorized activities.
    - Prohibit Special Recreation Permits on the shores of Toolik Lake.
    - No lands in the RNA would be made available for disposal (exchange or sale).

18. Tozitna River ACEC (835,000 acres)
    - Designate the Tozitna River ACEC to protect crucial salmon spawning habitat.
    - NSO for fluid minerals.
    - Closed to mineral materials development.
    - Subject to valid existing rights, permanent camps and support facilities would not be located in the 100-year floodplain.

19. Upper Teedriinjik River ACEC (295,000 acres)
    - Designate as an ACEC to protect crucial habitat for Chinook, summer and fall chum, coho, whitefish, and cisco.
    - The allocations below apply to the 100-year floodplains within the ACEC:
        - Closed to mineral materials disposal.
        - NSO for fluid mineral leasing.
        - ROW avoidance area.
        - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.
20. West Fork Atigun ACEC (33,000 acres)
    - Designate as an ACEC to protect priority Dall sheep habitat.
    - NSO for fluid mineral leasing and development.
    - Closed to nonenergy solid mineral leasing and development.
    - Subject to valid existing rights, camps and support facilities would be temporary and must be removed after their purpose has been accomplished.
    - Closed to mineral materials disposal.
21. Wheeler Creek ACEC (145,000 acres)
    - Designate as an ACEC to protect crucial summer chum salmon spawning habitat.
    - The allocations below apply to the 100-year floodplains within the ACEC:
        - Closed to mineral materials disposal.
        - NSO for fluid mineral leasing.
        - ROW avoidance area.
        - Subject to valid existing rights, permanent camps and support facilities would not be located in 100-year floodplains, except for scientific purposes.

2.5.2 Wild and Scenic Rivers

Goal:

1. Maintain free-flowing nature and identified outstandingly remarkable values.

Objective:

1. Protect and enhance the free-flowing nature, water quality, and outstandingly remarkable values.

Action:

1. Determine all 11 eligible stream segments as not suitable for inclusion in the National Wild and Scenic Rivers System and release them from interim management protections afforded eligible segments.

2.5.3 National Trails

Goals:

1. Identify, describe, and manage National Scenic and Historic Trails boundaries to protect values (per MS-6250, National Scenic and Historic Trail Administration; MS-6280, Management of National Scenic and Historic Trails and Trails under Study or Recommended as Suitable for Congressional Designation; MS-8353, Trail Management Areas – Secretarially Designated

National Recreation, Water, and Connecting and Side Trails; 600 DM 5, Standards for Federal Lands Boundary Evidence; and H-9600-1, Cadastral Survey Handbook).

2. The nature and purpose of the INHT (an ANILCA CSU) is to provide the following, while managing the trail consistent with the applicable provisions in ANILCA, including Sections 811, 1110, and the Title XI Transportation and Utility Systems Process:
    - A rich diversity of climate, terrain, scenery, wildlife, recreation, and resources largely unchanged since the days of the gold rush stampeders.
    - An extensive, isolated, primitive, historic landscape unmatched in the National Trail System.
    - A setting that demands user durability and skill.
    - A setting in which contemporary users can duplicate the experience and challenge of yesteryear.

3. Per the INHT nature and purpose, as described by Congress in 1978:
    - Conserve today's Iditarod Trail and adjacent landscape so users can experience the wildland setting and challenges faced by gold rush trail travelers and mushers a century ago.
    - Provide users with opportunities to view, experience, and appreciate examples of historic human use of the resources along the INHT, demonstrating how these resources are being managed 1) in harmony with the environment, 2) in support of the nature and purposes for which the trail was designated, and 3) without detracting from the overall experience of the trail.
    - Maintain the INHT National Trail Management Corridor to provide high-quality winter, trail-based use opportunities; conserve natural, historic, and cultural resources along the trail; use of the INHT would minimally affect adjacent natural and cultural environments and harmonize with the management objectives of land and resource uses that are, or may be, occurring on the lands through which the trail passes.
    - Preserve and protect the historic remains and historic settings of the INHT and associated historic sites for public use and enjoyment.

4. Provide opportunities for users to meet subsistence needs and outdoor recreation needs and promote the preservation of public access and enjoyment of the open air, outdoor areas, and historic resources of the nation, in a manner that supports the nature and purpose of the congressionally designated trails.

5. The proposed INHT Management Corridor was determined with the goal of harmonizing with and complementing any established multiple-use plans for the areas where it is located. In selecting the ROWs for the Management Corridor, fully consider minimizing any potential adverse impacts on adjacent landowners and users or their operations.

6. The INHT Management Corridor includes both BLM-managed lands and State and private lands. The BLM manages those segments of the INHT on BLM-managed lands and administers the INHT for those segments located on non-BLM-managed lands. Manage trails and maintain historic preservation on the BLM-managed lands. Administering involves coordinating trail management and historic preservation efforts with these landowners for these segments on non-BLM lands.

Objectives:

1. Inventory, maintain, and enhance the significant qualities of high-potential INHT segments and sites, as defined in the National Trails System Act.
2. Avoid or mitigate adverse effects on intact INHT segments, their settings, and associated sites and interference with the resources associated with the nature and purpose of the trail.
3. Work with adjacent landowners to maintain the continuity of the trail across all landownerships, as identified in the INHT Comprehensive Management Plan (BLM 1986b).

Actions:

1. Establish the INHT National Trail Management Corridor within the planning area. The purpose of the corridor is to conserve the resources, qualities, values, associated settings, and the primary uses that support the nature and purpose of the INHT, **Map 2.24**, Alternative E: Wilderness Study Area and National Historic Trail, **Appendix A**).
2. If the INHT is on any lands where a withdrawal is recommended for revocation and if the State of Alaska, through the Statehood Act, or an ANCSA corporation, through the ANCSA, desires conveyance of the parcels, reserve the INHT and the ability to manage it in the conveyance, as allowed under the National Trails System Act.

2.5.4 Wilderness Study Areas

Goal:

1. Preserve wilderness characteristics of the CAMA WSA.

Objective:

1. Manage the CAMA WSA consistent with BLM Manual 6330 – Management of BLM WSAs (BLM 2012c), and ANILCA until Congress acts on the wilderness recommendation.

Actions:

1. Manage lands in the CAMA WSA in a manner that will protect its wilderness characteristics until Congress acts on the wilderness recommendation (**Map 2.24**, **Appendix A**).
2. Apply management prescriptions to WSAs according to BLM policy; current BLM policy dictates the following management (BLM Manual 6330; BLM 2012c):
    - Manage as VRM Class I
    - Manage as ROW exclusion.
    - Close to fluid mineral leasing
    - Close to mineral material disposal
    - Close to nonenergy solid mineral leasing and development
    - Close to commercial timber harvest
    - Limit OHV travel and mechanized travel to existing ways.
3. Should Congress release the CAMA WSA from wilderness consideration, manage the lands to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics.

2.6 Management Decisions: Social and Economic Conditions

2.6.1 Hazardous Materials

Goals:

1. Require that the use of hazardous materials in the planning area be managed in accordance with all applicable federal, State, and local laws and regulations.
2. Protect human health and safety and environmental safety by minimizing environmental contamination from chemical, biological, and radiological sources on federal property or BLM-operated facilities.
3. Integrate environmental protection and compliance into all BLM-authorized and conducted activities.

Objectives:

1. Prevent new spills from occurring and prevent the creation of new contaminated sites.
2. Successfully clean up all contamination that occurs or is discovered from past land use to a degree that meets regulatory requirements and BLM future land uses.

Actions:

1. Identify contaminated sites by location to initiate assessment, cleanup, and restoration to maintain or improve the health of affected ecosystems.
2. Prioritize cleanup of hazardous materials sites with imminent or existing discharge of hazardous materials, based on the following criteria (not in ranked order):
    - Threatens human health and safety.
    - Adversely impacts drinking water sources.
    - Would impact aquatic resources.
    - Would impact cultural resources.
    - Are on lands selected for conveyance to Native corporations or the State of Alaska
3. Project operators would be responsible for cleanup associated with any activities caused by their actions.
4. Prevent or mitigate the effects of spills of hazardous materials by requiring the following:
    - Notice of any spill shall be given to the BLM AO as soon as possible but no later than 24 hours after occurrence.
    - All spills shall be cleaned up immediately and to the satisfaction of the BLM AO and all agencies with regulatory authority over spills.
    - Sufficient oil spill cleanup materials, such as sorbent pads and containment devices, shall be stored at all fueling points and maintenance areas. Drip basins and/or sorbent pads would be placed under all non-dry disconnect type fuel line couplings and valves during fueling.
    - All fuel and oil or petroleum product containers, including barrels and propane tanks, shall be marked with the holder’s name and the product type. Duck ponds shall be marked with the holder’s name.
    - Fuel containers and hazardous materials containers of any size shall be stored in secondary containment.

5. Fuel storage and refueling of equipment within 100 feet of any lake shoreline or top of streambank is prohibited. On a site-specific basis at the authorization stage, the BLM AO may expand this distance to include the 100-year floodplain (defined as an elevation of three times maximum bankfull depth), based on the site condition specified in the authorization.
6. Hazardous materials may be off-loaded from aircraft onto the ice but may not be stored on lakes or river ice.
7. All withdrawals relinquished to the BLM will be subject to a phase 1 environmental site assessment conducted pursuant to ASTM E1527–13.
8. Standard practice for environmental site assessments: Phase I environmental site assessment process (or current version), documenting potential environmental liabilities; if such are identified, the holder of the withdrawal would be required to complete the cleanup before relinquishing the site to the BLM; an updated phase I environmental site assessment would be completed to document cleanup and that there are no known environmental liabilities remaining on the property.
9. On-site compliance inspections are required for all BLM-authorized activities before authorization closeout.
10. Manage naturally occurring asbestos sites as follows, unless otherwise approved by the BLM AO:
    - Close to all surface-disturbing activities unless specific mitigations are developed during authorization.
    - Close to mineral material disposal.
    - Close to summer OHV use.
    - Allow no camping or competitive events that may disturb the site surface.

2.7 Future Public Involvement

The BLM will continue to work with existing partners, cultivate new partnerships, and seek and consider the views of the public. It will use methods including news releases and website postings to ask for participation and to inform the public of new and ongoing management actions and site-specific planning. The public is encouraged to contact the BLM (Central Yukon Field Office, 222 University Avenue, Fairbanks, Alaska 99709) and request that their names be placed on the CYFO mailing list, along with their specific area of interest (for example, wildlife, cultural resources, or socioeconomics) for plan implementation. The public may also make this request by calling (907) 474-2200.

The BLM will continue to coordinate, both formally and informally, with the numerous federal and State agencies, Native American Tribes, local agencies, and officials interested and involved in the management of public lands administered by the CYFO.

2.8 Management Plan Implementation

The BLM will develop an implementation plan to identify actions to achieve the desired outcomes of the Approved RMP. The implementation plan will assist BLM managers and staff to prepare budget requests and to schedule work priorities.

The BLM will prepare supplementary rules to provide full authority to BLM law enforcement to enforce management decisions made in the Approved RMP pursuant to the BLM's authority under 43 CFR 8365.1-6.

The BLM will issue implementation-level decisions such as those related to travel and transportation management to fully implement the Approved RMP. During implementation of the RMP, the BLM will prepare additional documentation for site-specific actions to comply with NEPA. This can vary from a simple statement of conformance with the ROD and adequacy of existing NEPA analysis to more complex environmental assessments or EISs that analyze several alternatives.

2.9 RMP Evaluation, Amendment, Maintenance, and Monitoring

2.9.1 RMP Evaluation

Following guidance in the BLM's Land Use Planning Handbook (BLM 2005), the BLM will periodically evaluate the Approved RMP to determine whether the land use plan decisions and NEPA analysis are still valid and whether the plan is being implemented effectively. Land use plan evaluations determine whether:

- The decisions remain relevant to current issues
- Decisions are effective in achieving or making progress toward achieving the desired outcomes specified in the RMP
- Any decisions need revision or amendment
- Any decisions need to be dropped from further consideration
- Any new decisions are needed

In making these determinations, the BLM's evaluation will consider whether mitigation measures such as those described in the Approved RMP are satisfactory, whether there are significant changes in the related plans of other entities, or whether there is significant new information. In addition to periodic evaluations, special evaluations may also be required to review unexpected management actions or significant changes in the related plans of Native American Tribes, other federal agencies, and State and local governments, or to evaluate legislation or litigation that has the potential to trigger an amendment or revision to the RMP. Evaluations may identify resource needs, as well as the means for correcting deficiencies and addressing issues through plan maintenance, amendments, or revisions. Evaluations should also identify where new and emerging issues and other values have surfaced.

2.9.2 RMP Amendments

Management decisions related to RMPs are changed through either a plan amendment or another RMP revision, although are unnecessary for Secretary-level decisions like withdrawals or revocations. The process for conducting plan amendments is similar to the land use planning process used in developing or revising RMPs. The primary difference is that circumstances may allow for completing a plan amendment through the environmental assessment process, rather than through an EIS. Plan amendments (43 CFR 1610.5-5) change one or more of the terms, conditions, or decisions of an approved land use plan. Plan amendments are most often prompted by the need to consider a proposal or action that does not conform to the plan; to implement new or revised policy that changes land use plan decisions; to respond to new, intensified, or changed uses on BLM-managed land; and to consider significant new information from resource assessments, monitoring, or scientific studies that change land use plan decisions.

The Approved RMP may be amended, should conditions warrant it. A plan amendment may become necessary if major changes are needed or for consideration of a proposal or action that does not conform to the plan. The results of monitoring, evaluation of new data, policy changes, or changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue specific. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Similar to RMP development, plan amendment and revision are accomplished with public input and the appropriate level of environmental analysis.

2.9.3 RMP Maintenance

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, or clarifying previously approved decisions. Some examples of maintenance actions include the following:

- Correcting minor data and typographical, mapping, or tabular data errors, such as updating acreage figures shown throughout the RMP. Acreages are based on geographic information system data, which are subject to constant refinement.
- Refining baseline information because of new inventory data (for example, refining the known habitat of SSS or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes).

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the environmental analysis required for making new land use plan decisions.

The BLM expects that new information gathered from field inventories and assessments, monitoring, research, other agency studies, and other sources will update baseline data and/or support new management techniques, required SOPs, and scientific principles. Where monitoring shows land use plan actions or SOPs are not effective, modifications or adjustments may occur without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid, and broadscale goals and objectives are not changed.

2.9.4 RMP Monitoring

Land use plan decision monitoring is a process that happens over the life of the RMP. The goal is to maintain a relevant RMP. Monitoring data are collected, examined, and used to draw conclusions about whether planned actions have been implemented in the manner prescribed by the RMP (implementation monitoring) and whether allowable use and management action decisions in the RMP and the resultant implementation actions are effective in achieving program-specific objectives or desired outcomes (effectiveness monitoring).

The BLM will monitor implementation of the Approved RMP and periodically evaluate the need for revisions or amendments every 5 years at a minimum, based on guidance in the BLM's Land Use Planning Handbook (BLM 2005). RMP evaluations will also be completed prior to any plan revisions and for major RMP amendments. Revisions to the RMP will be required to comply with FLPMA planning guidelines, as well as the environmental review requirements in NEPA.

The BLM uses conclusions drawn from monitoring to make recommendations on whether to continue current management or to determine what changes need to be made to implementation practices to better achieve RMP goals. Indicators, methods, locations, units of measures, frequency, and action triggers can be established by national policy guidance, in RMPs, or by technical specialists to address specific issues.

Based on staffing and funding levels, monitoring is annually prioritized consistent with the goals and objectives of the RMP. The BLM may work in cooperation with local, State, and other federal agencies, or it may use data collected by other agencies and sources when appropriate and available. If implementation of land use plans does not achieve anticipated desired outcomes, adaptive management may be necessary.

2.9.5 Adaptive Management

The Approved RMP will be implemented using an adaptive management process (**Appendix F**). The Department of the Interior Office of Environmental Policy and Compliance Environmental Statement Memorandum 13-11 defines adaptive management as "… a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes" (BLM 2018). Adaptive management processes are intended to constantly refine decisions, plans, and proposed activities rather than prescribe final solutions to the management of resources and uses.

To meet resource goals and objectives, the CYFO will implement the adaptive management process for appropriate decisions. Monitoring, reports, documents, and timelines associated with the adaptive management process will be subject to BLM budget and staffing constraints. The Central Yukon adaptive management framework is in **Appendix F**; this includes explanation of the rationale, objectives, strategy, management, connectivity corridors, and ecological benchmarks.

3. REFERENCES

Army and EPA (U.S. Department of the Army and U.S. Environmental Protection Agency). 2021. Memorandum of Agreement between the Department of the Army and the Environmental Protection Agency concerning Mitigation Sequence for Wetlands in Alaska under Section 404 of the Clean Water Act. Internet website: https://www.epa.gov/sites/default/files/2018-06/documents/epa_army_moa_alaska_mitigation_cwa_404_06-15-2018_0.pdf.

BLM (U.S. Department of the Interior, Bureau of Land Management). 1981. Southwest Planning Area Management Framework Plan, October 1981. Prepared by the Anchorage District Environmental Staff for the McGrath Resource Area. Anchorage, Alaska.

______. 1986a. Central Yukon Planning Area Resource Management Plan Record of Decision, September 1986. Fairbanks District Office, Northwest Resource Area, Fairbanks, Alaska.

______. 1986b. Iditarod National Historic Trail, Seward to Nome Route: A Comprehensive Management Plan. Washington DC. Internet website: https://www.arlis.org/docs/vol2/Iditarod/INHT_Comprehensive_Management_Plan/INHT_Comprehensive_Management_Plan.pdf.

______. 1991. Utility Corridor Resource Management Plan and Environmental Impact Statement Record of Decision. Arctic District Office, Fairbanks, Alaska. January 11, 1991.

______. 2005. Handbook H-1601-1 – Land Use Planning Handbook. BLM, Washington, DC. March 11, 2005. Internet website: https://www.ntc.blm.gov/krc/uploads/360/4_BLM%20Planning%20Handbook%20H-1601-1.pdf.

______. 2006. Sec. 207 Alaska Land Transfer Acceleration Act: A Review of D-1 Withdrawals. Internet website: https://www.blm.gov/sites/default/files/documents/files/BLM_AK_sec207report_d-1Withdrawals_low-res.pdf.

______. 2007. Final Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement. DOI-BLM-WO-WO2100-2007-0002-EIS. Internet website: https://eplanning.blm.gov/eplanning-ui/project/70300/510.

______. 2008a. Handbook 1790-1 – National Environmental Policy Act. BLM, Washington, DC. January 15, 2008. Internet website: https://www.ntc.blm.gov/krc/system/files?file=legacy/uploads/16011/BLM_NEPA_Handbook_H-1790.pdf.

______. 2008b. Manual 6840 – Special Status Species Management. BLM, Washington, DC. December 12, 2008.

______. 2012a. Manual 6400 – Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, Planning, and Management (Public). Rel. 6-136. BLM, Washington, DC. July 13, 2012.

______. 2012b. Manual 6310 – Conducting Wilderness Characteristics Inventory on BLM Lands. Rel. 6-129. BLM, Washington, DC. March 15, 2012.

_____. 2012c. Manual 6330 – Management of Wilderness Study Areas. Rel. 6-134. BLM, Washington, DC. July 13, 2012.

_____. 2015. Scoping Report for the Central Yukon Resource Management Plan. Central Yukon Field Office, Fairbanks, Alaska. March 2015. Internet website: https://eplanning.blm.gov/public_projects/lup/35315/56047/60740/CYRMP_Scoping_Report_Web_Final.pdf.

_____. 2016a. Record of Decision for the Final Programmatic Environmental Impact Statement for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States. Internet website: https://eplanning.blm.gov/eplanning-ui/project/70301/510.

_____. 2016b. Manual 1730 – Management of Domestic Sheep and Goats to Sustain Wild Sheep (Public). BLM, Washington, DC. March 2, 2016. Internet website: https://wafwa.org/wp-content/uploads/2020/07/BLM-Manual-1730-Manage-Domestics-to-Sustain-Wild-Sheep-2016.pdf.

_____. 2018. Coordinating Adaptive Management (AM) and National Environmental Policy Act (NEPA) Processes. Environmental Statement Memorandum No. ESM 13-11. September 24. Internet website: https://www.doi.gov/sites/doi.gov/files/uploads/esm13-11-adaptive-management-and-nepa- 508.pdf.

_____. 2021a. IM 2021-046, Reinstating the Bureau of Land Management (BLM) Manual Section (MS-1794) and Handbook (H-1794-1) on Mitigation. Washington, DC. Internet website: https://www.blm.gov/policy/im-2021-046.

_____. 2021b. Manual 1794 – Mitigation Manual (P). BLM, Washington, DC. September 22, 2021. Internet website: https://www.blm.gov/sites/default/files/docs/2021-10/IM2021-046_att1_0.pdf.

_____. 2021c. Handbook 1794-1 – Mitigation Handbook (P). Washington, DC. September 22, 2021. Internet website: https://www.blm.gov/sites/default/files/docs/2021-10/IM2021-046_att2.pdf.

_____. 2021d. Manual 6310 – Conducting Wilderness Characteristics Inventory on BLM Lands (Public). BLM, Washington, DC. January 8, 2021. Internet website: https://www.blm.gov/sites/default/files/docs/2021-01/BLM-Policy-Manual-6310.pdf.

_____. 2022. Alaska Native Vietnam-era Veterans Land Allotment Program Environmental Assessment. BLM Alaska State Office, Anchorage, Alaska. DOI-BLM-AK-0000-2021-0005-EA. Internet website: https://eplanning.blm.gov/public_projects/2014748/200491665/20057951/250064133/Native%20Veteran%20Allotment%20EA_Final_Consolidated_508.pdf.

_____. 2024. Central Yukon Proposed Resource Management Plan and Final EIS. BLM Fairbanks Office, Alaska. DOI-BLM-AK-F030-2013-0062-RMP-EIS. Internet website: https://eplanning.blm.gov/eplanning-ui/project/35315/570.

BLM and Alaska SHPO (U.S. Bureau of Land Management and Alaska State Historic Preservation Office). 2022. Final Programmatic Agreement Between United States Department of the Interior, Bureau of Land Management, and Alaska State Historic Preservation Officer Regarding the Alaska Native Vietnam-Era Veterans Land Allotment Program, Alaska.

BLM GIS (U.S. Bureau of Land Management Geographic Information Systems). 2017. GIS data used in the Central Yukon RMP alternatives, affected environment, and impact analysis. Last edit date: March 2024. Fairbanks, Alaska.

Congressional Research Service Report. 2021. Withdrawal of Federal Lands: Analysis of a Common Legislated Withdrawal Provision. Internet website: https://crsreports.congress.gov/product/pdf/R/R46657.

USFWS. 2017. Timing Recommendations for Land Disturbance & Vegetation Clearing. Region 7. Internet website: https://www.fws.gov/sites/default/files/documents/Timing%20Recommendations%20for%20Land%20Disturbance%20%26%20Vegetation%20Clearing%20-%20June%202017.pdf.

Wild Sheep Working Group. 2012. Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat. Western Association of Fish and Wildlife Agencies. Internet website: https://wafwa.org/wpdm-package/recommendations-for-domestic-sheep-and-goat-management-in-wild-sheep-habitat-2/.

This page intentionally left blank.

Glossary

100-year floodplain. The area inundated by the 100-year flood or the 1 percent annual exceedance probability flood. It is the flood that has a 1 percent chance of being equaled or exceeded in any single year. It is often mistakenly thought of as the flood that occurs once every 100 years. If a project is within the 100-year floodplain and the project life is expected to be 30 years, it would have a 25 percent chance of experiencing flood damage due to a 100-year flood. For a project with an anticipated life of 15 years, the chance of incurring flood damage due to a 100-year flood would be 14 percent.

The 100-year floodplain is difficult to accurately map without extensive ground surveys. On-the-ground surveys conducted in the Central Yukon planning area typically employ the valley width that corresponds to an elevation of three times maximum bankfull depth as an estimate of the 100-year floodplain (FEMA 2015).

17(d)(1) withdrawal. A withdrawal made under the authority of Section 17(d)(1) of the Alaska Native Claims Settlement Act. The purpose is to ensure that the public interest in the withdrawn lands is properly protected and to determine the proper classification of the lands and the public values of the lands that need protection. 17(d)(1) withdrawals are generally withdrawn from 1) all forms of appropriation under the public land laws and from 2) location and entry under the mining and mineral leasing laws. Over the last 50 years, certain withdrawals have been revoked in part and reclassified for specific purposes, meaning that there are 17(d)(1) withdrawals that are not necessarily withdrawn from all forms of appropriation and from location and entry under the mining and mineral leasing laws. In this document, the term specifically applies to those lands withdrawn under this authority in the decision area.

acquisition. Acquisition of lands can be pursued to facilitate various resource management objectives. Acquisitions, including easements, can be completed through exchange, purchase, or donation.

administrative use. Official use related to management and resources of the public lands by Federal, State, or local governments or non-official use sanctioned by an appropriate authorization instrument, such as right-of-way, permit, lease, or maintenance agreement.

aircraft. Fixed-wing and rotary wing aircraft.

Alaska National Interest Lands Conservation Act (ANILCA). A law passed in 1980, designating 104 million acres for conservation by establishing or expanding national parks, wildlife refuges, wild and scenic rivers, wilderness areas, forest monuments, conservation areas, recreation areas, and wilderness study areas to preserve them for future generations.

Alaska Native Claims Settlement Act (ANCSA). A law passed by Congress in 1971 to settle aboriginal land claims in Alaska. Under the settlement, the Natives received title to over 44 million acres, to be divided among some 220 Native villages and 12 Regional Corporations established by the act. The corporations shared in a payment of $962,500,000.

all-terrain vehicle (ATV). A wheeled vehicle other than a snowmobile that is defined as having a curb weight of 1,000 pounds or less, a maximum width of 50 inches or less, handlebar steering, three or more low-pressure tires, and a seat designed to be straddled by the operator.

ambient air quality standard. Air pollutant concentrations of the surrounding outside environment that cannot legally be exceeded during fixed time intervals and in a specific geographic area.

appropriation. Original public domain lands which are covered by an entry, patent, certification, or other evidence of land disposal; for certain purposes, public lands which are within a reservation, which contain improvements constructed with the aid of federal funds, or which are covered by certain classes of leases are also considered appropriated. For example, a material site located along a federal highway may be an appropriation because of the way it is defined by the law, even though a right-of-way is not normally considered an appropriation.

areas of critical environmental concern (ACEC). Special area designation established through the BLM's land use planning process (43 CFR 1610.7-2). It designates where special management attention is required, when such areas are developed or used or where no development is required. The intent is to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes or to protect life and safety from natural hazards. The level of allowable use within an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitations to protect identified resources or values.

artifact. An object that was made, used, or transported by humans that provides information about human behavior in the past. Examples are pottery, stone tools, and bones with cut marks.

avoidance, mitigation. Avoiding an impact altogether by not taking a certain action or parts of an action (40 CFR 1508.20). It may also include avoiding the impact by moving a proposed action to a different time or location.

backcountry conservation area (BCA). Management allocation used to maintain and enhance habitat for recreationally important fish and wildlife species and to expand public access for hunting, angling, and other forms of wildlife-dependent recreation. When applied, they allow the BLM to prioritize habitat management actions, such as restoring riparian areas, controlling invasive species, managing vegetation, improving fish passage, and reducing wildfire risk.

baseline. The preexisting condition of a resource, at all relevant scales, which can be quantified by an appropriate metric. During environmental reviews, the baseline is considered the existing affected environment without a project. It is used to compare predictions of the effects of the proposed action or a reasonable range of alternatives.

best management practice (BMP). A suite of techniques that guide, or may be applied to, management actions to help achieve desired outcomes.

casual use (realty). Short-term noncommercial activity which does not cause appreciable damage or disturbance to the public lands, their resources or improvements, and which is not prohibited by closure of the lands to such activities.

casual use (mineral extraction). Activities ordinarily resulting in no or negligible disturbance of the public lands or resources.

casual use (recreation). Noncommercial or nonorganized group or individual activities on public land. Casual use complies with land use decisions and designations, does not award cash prizes, is not publicly advertised, poses minimal risk for damage to public land or related water resources, and generally requires no monitoring.

Central Dalton SRMA. The Central Dalton SRMA is described as the inner corridor and is bounded by the Yukon River Crossing RMZ to the south, the Coldfoot RMZ to the north, and, for much of the SRMA, the BCA to the east and west. The Central Dalton SRMA would be managed to provide three RMZs: Yukon River Crossing, Dalton Uplands, and Coldfoot.

climate change. Any significant and extended (over decades or longer) change in measures of climate, such as temperature, precipitation, or wind regimes. Climate change may result from natural factors, natural processes, and human activities that change the atmosphere's composition and the land surface.

Code of Federal Regulations (CFR). A codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the federal government. The CFR is divided into 50 titles that represent broad areas subject to federal regulation. Each volume of the CFR is revised at least once each year and issued on a quarterly basis.

commercial recreational use. Recreational use of public lands and related waters for business or financial gain. The use is considered commercial when any person, group, or organization makes or attempts to make a profit, receive money, amortize equipment, or obtain goods or services as compensation from participants in recreation on public lands. An activity, service, or use is commercial if anyone collects a fee or receives other compensation that is not strictly a sharing of, or is in excess of, actual expenses incurred for the purpose of the activity, service, or use, such as guides, outfitters, and air taxi operators.

compensatory mitigation. Compensating for the remaining impacts after all appropriate and practicable avoidance and minimization measures have been applied, by replacing or providing substitute resources or environments through the restoration, establishment, enhancement, or preservation of resources and their values, services, and functions (600 DM 6.C., citing 40 CFR 1508.20(e)).

connectivity. See *hydrologic connectivity*, *landscape connectivity*, and *general habitat connectivity*.

connectivity corridors. Components of a landscape that facilitate the movement of matter, energy, or organisms between elements of the landscape.

conservation system unit (CSU). ANILCA defines a CSU as any Alaska unit of National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers Systems, National Trails System, National Wilderness Preservation System, or a National Forest Monument.

conveyed. Title to land transferred from one party to another. As used in the EIS, the term will only refer to lands being transferred from the United States to another entity. The United States generally conveys land via patent, however in Alaska it also conveys title to land to Native corporations by patent and interim conveyance, to the State of Alaska by patent and tentative approval, and Native allottees via a Certificate of Allotment.

core caribou range. The portion of a caribou herd's total range that represents its main use area. The area is delineated using data from radio-collared caribou collected from 1982 to 2017 and represents approximately 75 percent of the total number of historical data locations for each herd.

cultural resources. These resources are in locations of human activity, occupation, or use. They include archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and locations of traditional cultural or religious importance to specified social or cultural groups.

curb weight. The weight of a vehicle with a full tank of fuel and all fluids full, but with no people or cargo loaded. It is synonymous with wet weight and operating weight.

Dall sheep habitat area (DSHA). BLM-managed lands identified as having the highest habitat conservation value in relation to Dall sheep.

Dalton Corridor BCA. The goal of the Dalton Corridor BCA is to conserve backcountry conservation management criteria areas and to provide for dispersed, wildlife-dependent recreation in order to meet wildlife objectives outlined in Appendix K. Commonly known as the "outer corridor" of the Dalton Corridor focusing on providing semi-primitive recreational hunting opportunities.

Dalton Corridor SRMA. Under the current management plan (Alternative A), the Dalton Corridor SRMA is designated as approximately 2.2 million acres and would continue to operate and be managed under the 1991 Recreation Area Management Plan, Dalton Highway.

Dalton Highway. A common reference for the James Dalton Highway, a 414-mile highway from Livengood, Alaska, to Prudhoe Bay.

Dalton Highway Corridor SRMA. The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing at MP 56 to the northern edge of BLM-managed lands next to the Utility Corridor at MP 300. This SRMA has been divided into nine resource management zones (RMZs): Yukon River, Finger Mountain, Arctic Circle, Grayling Lake, Chapman Lake, Coldfoot, Brooks Range South, Brooks Range North/Galbraith Lake, and Outer Corridor. These include the inner utility corridor and the outer utility corridor, as described in the Utility Corridor RMP/EIS (BLM 1991). The RMZs include rural, frontcountry, backcountry, and semi-primitive recreation settings.

Dalton Uplands RMZ. One of multiple resource management zones in the Central Dalton SRMA under Alternatives B and C2.

decision area. The lands in a planning area for which the BLM has authority to make land use and management decisions. In general, the BLM has jurisdiction over all BLM-managed lands (surface and subsurface) and over the subsurface minerals only in areas of split-estate (areas where the BLM manages federal subsurface minerals, but the surface is owned by a nonfederal entity, such as a state trust land or private land).

degradation. Deterioration or lowering in quality (for instance, of air quality, water quality, or permafrost).

designated trail. A narrow section of developed linear travel way, with an approved designation for traversing by means of human-powered, stock, or off-road vehicle transportation. Travel on designated trails allows a 100-foot-wide travel way (50 feet on either side of center line of trail). Motor vehicle designations include parking along designated routes and at facilities associated with designated routes when it is safe to do so and when not causing damage to resources. This provision recognizes that, from a practical standpoint, one vehicle width from the edge of the route surface may be necessary to park a vehicle, to perform a repair, or to allow another party to pass, to allow dispersed camping off the trail, and to allow enough area to navigate around obstacles until a trail can be repaired.

development node. An area in which development is focused, creating a central connection point for infrastructure and related activities.

disturbance. Alteration of the vegetative cover or ground surface. Human disturbance is caused by such activities as clearing, excavating, or introducing sources of invasive species. Natural disturbance is caused by natural events, such as lightning-caused wildfires or windstorms.

easement. An authorization for a non-possessory, non-exclusive interest in lands which specifies the rights of the holder and the obligation of the BLM to use and manage the lands in a manner consistent with the terms of the easement.

ecological benchmark. An area that is representative of key ecological indicators for an ecoregion and, thus, can serve as a reference for understanding the natural dynamics of ecosystems and their response to human activities to facilitate adaptive management strategies.

ecological function. The biological, geochemical, and physical processes and interactions that take place or occur within an ecosystem.

ecological value. Beneficial aspect of an ecological system or system component.

ecoregion. Geographical region characterized by specific ecological patterns, including soil types, flora and fauna, climatic conditions, and ecological functions.

effectiveness monitoring. Verifying that mitigation is achieving the required outcomes.

encumbered lands. Lands that are not currently vacant, unappropriated, or unreserved and therefore unavailable for selection under 6(b) of the Alaska Statehood Act. Encumbrances include, among other actions, 17(d)(1) withdrawals, ANCSA selections, other agency withdrawals, Alaska Native veterans' allotment selections under the Dingell Act, or mining claims.

endangered species. An animal or plant designated by the U.S. Fish and Wildlife Service to receive federal protection status because it is in danger of extinction throughout all or a significant portion of its natural range.

environmental impact statement (EIS). A detailed statement of a given project's environmental consequences, including unavoidable adverse environmental effects, alternatives to the proposed action, the relationship between local short-term uses and long-term productivity, and any irreversible or irretrievable commitment of resources.

environmental justice. The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

essential fish habitat. Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Essential Fish Habitat is defined by the Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265).

executive order. A rule or order issued by the president and having the force of law.

extensive recreation management area (ERMA). A BLM-managed land unit identified in land use plans and containing all acreage not identified as an SRMA. Recreation management actions win an ERMA are limited to only those of a custodial nature.

Federal Land Policy and Management Act (FLPMA). A law passed in 1976 to establish public land policy, to provide guidelines for its administration, and to provide for the management, protection, development, and enhancement of public lands.

***Federal Register*.** A daily publication that reports presidential and federal agency documents.

fire regime. A description of the patterns of wildland fire occurrences, frequency, size, severity, and, sometimes, vegetation and fire effects, in each area or ecosystem. A fire regime is a generalization based on wildland fire histories at individual sites. There are five standard fire regimes, as follows:

- Fire Regime I—with a fire frequency of 0–35 years, surface fire to mixed fire type
- Fire Regime II—with a fire frequency of 0–35 years frequency, stand replacement fire type
- Fire Regime III—with a fire frequency of 35–100+ years, with a mixed fire type
- Fire Regime IV—with a fire frequency of 35–100+ years, with a stand replacement fire type
- Fire Regime V—with a fire frequency of 100+ years, with a stand replacement fire type

fluid minerals. Oil, gas, coal bed natural gas, and geothermal resources.

fugitive dust. Particles suspended randomly in the air, usually from road travel, excavation, or rock loading.

general habitat connectivity. The degree to which movement is facilitated between or within elements of the environment, without specificity to species, life form, element, or process.

habitat. The physical space in which a plant or animal lives and the abiotic and biotic entities (e.g., resources) it uses and selects in that space

harvest (with respect to timber and woody vegetation). Removing vegetation for the purpose of selling, bartering, or using the materials or for manipulating vegetation structure for an intended outcome. Harvest, as used herein, does not include stripping vegetation to develop an authorized mining operation or mineral material site where overburden is required to be stockpiled and reused for reclamation. Harvest, as used herein, does not include wanton injury or destruction of plants or taking of plant materials that are wasted.

hazardous air pollutants. Also known as toxic air pollutants, they are those that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. The Environmental Protection Agency controls 187 hazardous air pollutants, including volatile organic compounds, heavy metals, and persistent bioaccumulative toxins. The most widespread volatile organic compounds commonly analyzed are benzene, ethylbenzene, toluene, xylene, n-hexane, and formaldehyde.

hydrologic cycle. Includes the fundamental components of precipitation, infiltration, runoff, and evaporation, which give one insight as to the origin of water. It is used to determine the downstream transfer of water, sediment, nutrients, and organic debris and ultimately defines the physical and biological character of the stream.

hydrologic regime. Variations in the state and characteristics of a waterbody that are regularly repeated in time and space and that pass-through phases, such as seasons.

ice road. A travel route constructed with water to create a hardened ice base suitable for high traffic volumes and heavy loads. Ice roads begin as prepacked snow trails that are then saturated with water creating a road profile that consists of ice from the ground surface to the traveling surface. Ice roads often require specialized equipment for construction.

Inner Corridor. Referenced in Section 2 of PLO 5150, this linear portion of PLO 5150 is the inner corridor of the PLO; it overlaps the Dalton Highway and the Trans-Alaska Pipeline.

intactness. The degree to which a natural landscape or ecosystem is unaltered.

landscape. An entity with structural elements of patch, mosaic, and corridor, reflecting a mix of ecosystems, habitats, and land uses.

land use action. the identification in a land use plan of the actions BLM may take following a land use plan decision.

land use allocation. The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

land use authorization. Any authorization to use the public lands issued under 43 CFR Chapter II Subchapter B.

landscape resilience. The ability of landscape components to absorb change and persist after disturbance.

lease. A land use authorization to possess and use public lands for a fixed period of time.

lentic area. Wetland or riparian area with standing water habitat, such as a lake, pond, seep, bog, and meadow.

locatable minerals. Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. They include deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

mass wasting. Downward movement by gravity of rock and soil on the sloped top layers of earth’s surface.

mineral materials. Materials such as sand, gravel, and common varieties of stone, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Materials Act of 1947, as amended.

minimize. To reduce harmful effects to a level that does not have significant adverse effects on wildlife populations or their habitat in the planning area or significantly reduce the public’s opportunity for successful harvest or nonconsumptive use of wildlife.

mitigation. Includes avoiding an impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).

National Ambient Air Quality Standards (NAAQS). The Clean Air Act requires the U.S. Environmental Protection Agency to set national ambient air quality standards (codified in 40 CFR 50) for pollutants considered harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards: Primary standards provide public health protection, including protecting the health of sensitive populations, such as asthmatics, children, and the elderly; secondary standards protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The EPA has set standards for six principal pollutants (see *criteria air pollutants*, above). Periodically, the standards are reviewed and may be revised.

National Wild and Scenic Rivers System (NWSRS). A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: (1) recreational—rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundments or diversion in the past; (2) scenic—rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped but accessible in places by roads; and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Native allotment. BLM-managed lands that have been conveyed under the Alaska Native Allotment Act of 1906; ANCSA; the Alaska Native Vietnam Veterans Act of 1998; or Section 1119 of the John D. Dingell, Jr. Conservation, Management, and Recreation Act.

Native-selected. BLM-managed lands that have been selected by a Regional Corporation or a Village Corporation under the ANCSA and have yet to be conveyed. ANCSA gave Alaska Natives an entitlement of approximately 44 million acres to be selected from a pool of public lands specifically defined and withdrawn by the act for that purpose.

outcome. A clearly defined and measurable result that reflects the desired condition of a resource.

outstandingly remarkable values. Values among those listed in Section 1(b) of the Wild and Scenic Rivers Act of 1968: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values …." Other similar values that may be considered are ecological, biological, or botanical.

no surface occupancy (NSO). A fluid mineral leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the NSO area.

objective. A description of a desired outcome for a resource.

Outer Corridor. The area of PLO 5150 not including the Inner Corridor.

paleontological resource. Any fossilized remains or traces of organisms that are preserved in or on the earth's crust, which are of scientific interest, and that provide information about the history of life.

permafrost. Soil, sand, gravel, or bedrock that has remained below 32 degrees Fahrenheit for two or more years.

permit. A short-term revocable land use authorization to use public lands for specified purposes.

planning area. The geographic area within which the BLM will make decisions during planning. A planning area boundary includes all lands regardless of jurisdiction; however, the BLM will make decisions only on lands under its jurisdiction, including subsurface minerals. Unless the BLM State Director determines otherwise, the planning area for an RMP is the geographic area associated with a particular field office (43

CFR 1610.1(b)). BLM State Directors may also establish regional planning areas that encompass several field offices or states, as necessary.

$PM_{2.5}$. The subset of PM_{10} particles that have aerodynamic diameters less than or equal to 2.5 microns.

pollutant. Any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

Potential Fossil Yield Classification (PFYC). A classification system the BLM uses to assess potential occurrences of paleontological resources in mapped geologic units. It provides classifications that may be used to assist in determining the need for further assessment or actions. The PFYC system is created from available geologic maps and assigns a class value to each geological unit, representing the potential abundance and significance of paleontological resources that occur in that geological unit. PFYC values range from Class 1, very low, to Class 5, very high, which indicate both the probability for the mapped unit to contain significant paleontological resources and the degree of management concern for the resource. Geologic units without enough information associated with them to assign a PFYC value may be assigned Class U, Unknown Potential. This classification does not reflect rare or isolated occurrences of significant fossils or individual localities, only the relative occurrence on a formation- or member-wide basis. Any rare occurrences may require additional assessment and mitigation if they fall within the area of anticipated impacts.

potential natural conditions (PNC). PNCs represent the range of chemical, physical, and biological conditions expected at a site under minimal anthropogenic impacts, but they include natural disturbances. In the case of RMP objectives and reclamation plans, the BLM uses indicators of ecosystem health and percentiles to assess the attainment of management objectives. For indicators that are expected to decrease with disturbance (e.g., vegetation composition), values above the 25th percentile would be considered within PNCs. Values between the 25th and 5th percentile would be considered a moderate departure from PNCs, and values below the 5th percentile would be considered a major departure from PNCs. For indicators that are expected to increase with disturbance (e.g., the amount of bare ground, nonnative invasive plant species, and the proportion of soil surface in large intercanopy gaps), values below the 75th percentile would be considered within PNCs. Values between the 75th and 95th percentile would be considered a moderate departure from PNCs, and values above the 95th percentile would be considered a major departure from PNCs.

prescribed fire. A fire purposefully ignited to meet specific objectives. Before it is used, there must be a written, approved fire plan and legal requirements must be met. Also known as a prescribed burn.

public land use. The occupancy, use, development, or traversing of BLM-managed surface or mineral estate; may be BLM-proposed or externally proposed.

public land order. PLOs are issued by the Secretary of the Interior to implement, modify, extend, or revoke land withdrawals under the delegation of the President’s authority to withdraw land in 1952 under Executive Order 10355 until 1976 and then pursuant to Section 204 of the Federal Land Policy and Management Act of 1976 or other statutory authorities. Withdrawals of land remove land from the operation of all or some of the public land laws, including from location and entry under the mining laws, leasing under the mineral or geothermal leasing laws or mineral disposal under the mineral materials disposal laws.

priority species. A species in the planning area that is recognized as significant for at least one factor, such as density, diversity, size, public interest, remnant character, or age (BLM Handbook 1601).

prospecting. Exploring lands open for mineral entry to determine whether a valuable mineral deposit exists.

reasonable access. Legal or physical access to subsistence resources is generally available to qualified rural residents (ANILCA 8.811).

reference condition. The best estimate of biotic integrity, given the characteristics of aquatic sites that reflect minimal stress related to human activity. The acceptance of minimal stress recognizes that sampling sites that are truly undisturbed do not exist; for example, the condition in the presence of atmospheric contaminants that is well below the threshold for effects but nonetheless present. Reference condition describes not a single value but a distribution of values for a given index or metric that results from natural variability and sampling error, both in time and in space (adapted from Stoddard et al. 2006).

research natural area (RNA). A land management status that reserves the area for uses that are compatible with the resource of interest and research for which the area was designated.

resources (and their values, services, and functions). Natural, social, or cultural objects or qualities. Resource values are the importance, worth, or usefulness of resources; resource services are the benefits people derive from resources; and resource functions are the physical, chemical, and biological processes that involve resources.

right-of-way. The public lands that the BLM authorizes a holder to use or occupy under a particular grant or lease.

right-of-way avoidance areas. Areas available for land use authorizations that may entail special stipulations or consideration of other site-specific alternatives to protect specified resources.

right-of-way exclusion areas. Areas where land use authorizations are prohibited.

riparian. Relating to or situated on the banks of a river.

riparian vegetation. Vegetation, habitats, or ecosystems that are associated with streams or lakes or that depend on the existence of perennial, intermittent, or ephemeral surface or subsurface water drainage.

scenic rivers. Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

segregate. In public land terms, where a parcel is segregated it is unavailable for other forms of appropriation.

State-selected. Formerly unappropriated and unreserved public lands that were selected by the State of Alaska as part of Section 6(b) of the Alaska Statehood Act of 1958 and Section 906 of ANILCA. Until conveyance, State-selected lands are managed by the federal agency with jurisdiction of the lands, including BLM, NPS, FWS, and the Forest Service. Section 906(f) of ANILCA allowed for over selection by the State by up to 25 percent of the entitlement. Therefore, some State-selected lands will eventually be retained in long-term Federal management.

sensitive soils. Those mapped by the BLM to be in one of the following categories: steep slopes, thaw-sensitive permafrost, or wetland soils or those that are highly susceptible to erosion or that have high moisture content.

site potential. The highest ecological status a riparian-wetland area can attain, given no political, social, or economic constraints; often referred to as the PNC. The PNC would be represented by the statistical distributions for a set of regional reference conditions. That portion of the distribution for a particular metric that excludes outliers, and the upper or lower tail of the distribution would represent PNC.

slumping. Occurs when slopes are undercut by wave or stream action and the soft soil collapses, creating a "thaw slump."

snowmachine, snowmobile. A motorized vehicle that is designed for use over snow, that runs on a track or tracks and uses a ski or skis for steering, that has a curb weight of 1,000 pounds or less and a maximum width of 50-inches or less, is steered using handlebars, and has a seat designed to be straddled by the operator (does not include machinery used strictly for the grooming of nonmotorized trails).

Snow trail: Packed snow that may be used as a "road" with more specialized equipment. Snow trails are generally prepacked snow to a packed depth equal to or greater than 6 inches and may include snow ramps for river/creek crossings. Snow trails are best suited for light loads and tracked vehicle traffic. Water misting may be used sparingly to harden areas where the trail passes over sensitive vegetation and/or areas that may be subject to wind scour. Snow trails are best suited to light vehicle use and tracked equipment.

special recreation management area (SRMA). A public land unit identified in land use plans. Its purpose is to direct recreation funding and personnel to fulfill commitments made to provide specific, structured recreation opportunities. Both land use plan decisions and subsequent implementing actions for recreation in each SRMA are geared to a strategically identified primary market—destination, community, or undeveloped.

special status species. Special status species include endangered species, threatened species, proposed species, candidate species, State-listed species, and BLM Alaska sensitive species. Species designated as BLM sensitive must be native species that occur on BLM-managed lands and for which the BLM has significant management capability to affect their conservation status. In addition, one of the following two criteria must also apply: (1) There is information that a species is known or predicted to undergo a downward trend such that its viability or a distinct population segment of the species is at risk across all or a significant portion of its range; or (2) the species depends on ecological refugia, specialized habitats, or unique habitats, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.

subsistence uses. The customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of inedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter or sharing for personal or family consumption; and for customary trade. This includes any use of surface transportation to access subsistence resources, as provided for under Alaska National Interest Lands Conservation Act (ANILCA), Sections 811 and 1110.

suitable river. An eligible river segment found, through administrative study, to meet the criteria for designation as a component of the National Wild and Scenic Rivers System, as specified in Section 4(a) of the Wild and Scenic Rivers Act (BLM Manual 6400, Wild and Scenic Rivers—Policy and Program Direction for Identification, Evaluation, Planning, and Management).

surface disturbance. See *surface-disturbing activities.*

surface-disturbing activities. All activities that involve excavation, earthwork, soil disturbance, soil compaction, stream bank alteration; an increase in soil erosion potential, vegetation removal, or vegetation damage extensive enough to affect vegetative health beyond one growing season.

threatened and endangered species. Plant or animal species listed by the U.S. Fish and Wildlife Service under the Endangered Species Act as in danger of becoming either extinct or threatened, to the degree that their continued existence is in question.

timber. All woody vegetation 5 inches in diameter at breast height (dbh) or larger. By industry convention, dbh is the diameter of the outside bark, measured 4.5 feet above the ground. This convention was the standard used for timber size in this RMP.

top-filed. Section 906(e) of ANILCA gave the State of Alaska the right to make top-filings (future selection applications) for its land entitlement selections, subject to valid existing rights and Native selection rights under ANCSA. Native selection rights could include individual Native allottees, as well as Village and Regional Corporations. A top-filing makes the State's claim to land fourth in line as a contingent selection. A valid existing right would also include any federal administrative withdrawals, such as the ANCSA PLOs being discussed herein. Top-filings prevent the land's adjudication as a "first in line" entitlement selection. This is because they are a future interest and not counted toward the State's total land entitlements; however, once Native selection rights under ANCSA are finalized and the withdrawal is revoked, the State's selection would automatically attach to the land as a selection and be ready for adjudication.

valid existing right. A third-party (i.e., nonfederal) interest in federal land that the relevant federal agency cannot terminate or unduly limit.

wetlands (biological wetlands): Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include habitats such as swamps, marshes, and bogs. A jurisdictional wetland is a wetland area delineated and identified by specific technical criteria, field indicators, and other information, for the purposes of public agency jurisdiction. The U.S. Army Corps of Engineers regulates "dredging and filling" activities associated with jurisdictional wetlands. Other federal agencies that can become involved with matters that concern jurisdictional wetlands include the U.S. Fish and Wildlife Service, EPA, and the Natural Resource Conservation Service

where appropriate. Includes consideration of necessity, legal constraints, safety, funding, and feasibility.

wilderness characteristics. The area's size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation; they may also include supplemental values. Lands with wilderness characteristics are those that have been inventoried and determined by the BLM to possess wilderness characteristics, as defined in Section 2(c) of the Wilderness Act.

wildland fire. General term describing any nonstructural fire in the wild. It is categorized into two distinct types: wildfires (unplanned ignitions or prescribed fires that are declared wildfires) and prescribed fires (planned ignitions).

withdrawal. Includes 1) federal land set aside and dedicated to a present, governmental use; 2) public land set aside for some other public purpose (e.g., pending a determination of how the land is to be used); 3) an action approved by the Secretary of the Interior or a law enacted by Congress that closes land to specific uses under the public land laws (usually sale, settlement, location, and entry), or 4) limits on land use to maintain public values, reserves area for particular public use or program, or transfers jurisdiction of an area to another federal agency. Usually established through a PLO, Executive Order, or enacted by legislation.

Appendix A

Maps

This page intentionally left blank.

APPENDIX A
Maps

1.1 Planning Area
1.2 Decision Area
1.3 Public Land Order Withdrawals

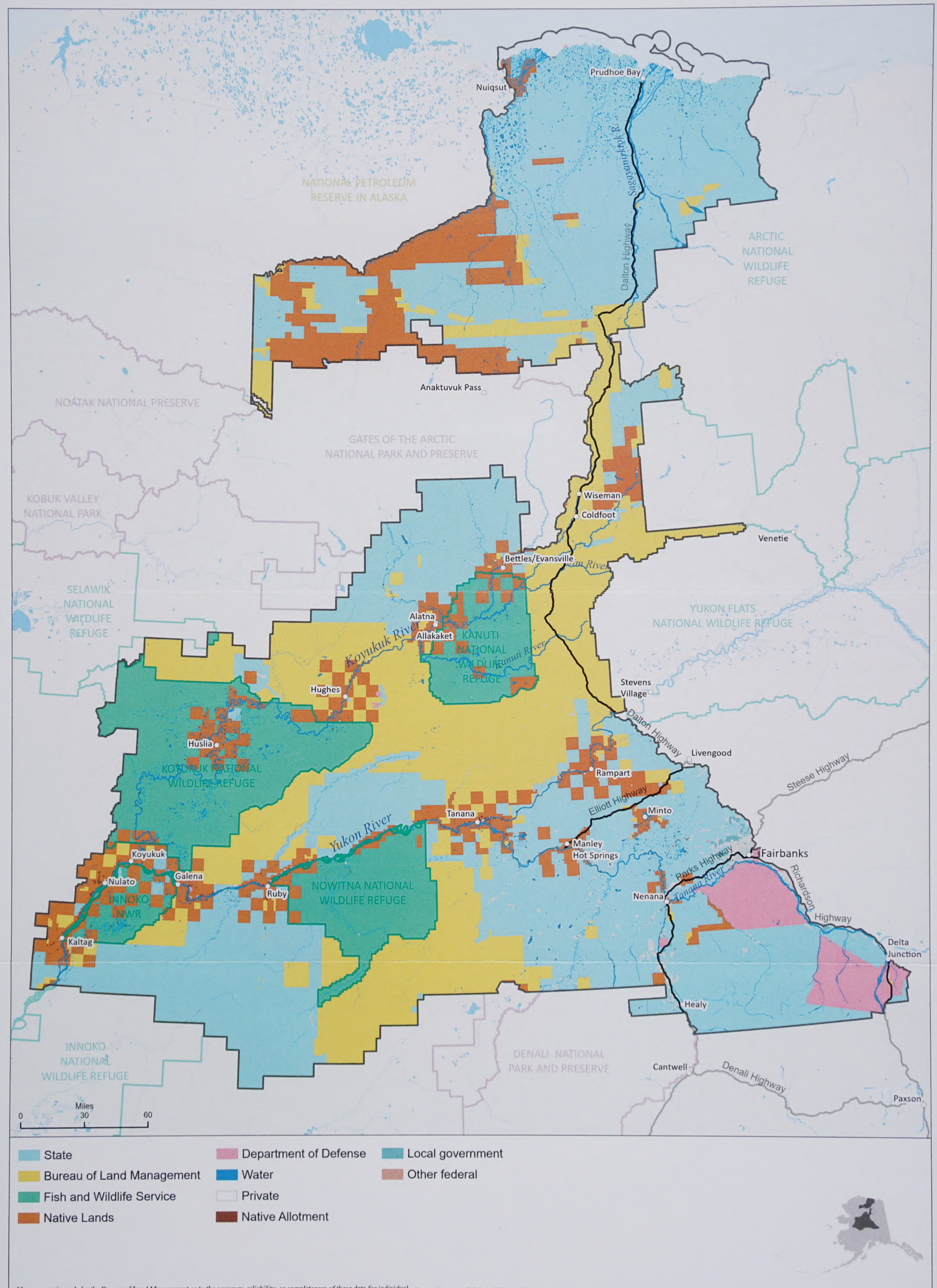
2.1 Alternative E: Core Caribou Ranges
2.2 Alternative E: Dall Sheep
2.3 Alternative E: Visual Resource Management
2.4 Alternative E: Lands with Wilderness Characteristics
2.5 Alternative E: Forestry
2.6 Alternative E: Land Tenure
2.7 Alternative E: Public Land Order Withdrawals; Fairbanks Subunit
2.8 Alternative E: Public Land Order Withdrawals; Middle Yukon Drainages Subunit
2.9 Alternative E: Public Land Order Withdrawals; Utility Corridor Subunit
2.10 Alternative E: Recommend Partial Revocation of ANCSA 17(d)(1) Withdrawals for Allotment selection by Alaska Native Vietnam-era Veterans
2.11 Alternative E: Right-of-Way Allocations
2.12 Alternative E: Fluid Mineral Leasing
2.13 Alternative E: Fluid Mineral Leasing, No Surface Occupancy
2.14 Alternative E: Nonenergy Solid Leasable Minerals
2.15 Alternative E: Locatable Minerals
2.16 Alternative E: Mineral Materials
2.17 Alternative E: Recreation; Utility Corridor Subunit
2.18 Alternative E: Travel Management Areas
2.19 Alternative E: Travel and Transportation Management; Fairbanks Subunit
2.20 Alternative E: Travel and Transportation Management; Middle Yukon Drainages Subunit
2.21 Alternative E: Travel and Transportation Management; Utility Corridor Subunit
2.22 Alternative E: ACECs/RNAs; Middle Yukon Drainages Subunit
2.23 Alternative E: ACECs/RNAs; Utility Corridor Subunit
2.24 Alternative E: Wilderness Study Area and National Historic Trail

Geographic information system (GIS) data have been used to perform acreage calculations and to generate the maps in **Appendix A**, here. Calculations depend on the quality and availability of data. Most calculations in this Resource Management Plan are rounded to the nearest 1,000 acres or 1 mile. Given the scale of the analysis, the compatibility constraints between datasets, and the lack of data for some resources, all calculations are approximate and serve for comparison and analytic purposes only. Likewise, the maps in **Appendix A** are provided for illustration only and are subject to the limitations discussed above. The Bureau of Land Management may receive additional or updated data, so acreages may be recalculated and revised later.

Maps in **Appendix A** display data on Bureau of Land Management surface or subsurface. The Department of Defense's surface and mineral estate are withdrawn, and the withdrawal will be retained for all alternatives. As such, this Resource Management Plan does not make other decisions on Department of Defense land, except for designating the travel management areas.

BLM Library
Denver Federal Center
Bldg. 85, OC-521
P.O. Box 25047
Denver, CO 80225

Planning Area


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Richardson Highway
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
State
Bureau of Land Management
Fish and Wildlife Service
Native Lands
Department of Defense
Water
Private
Native Allotment
Local government
Other federal

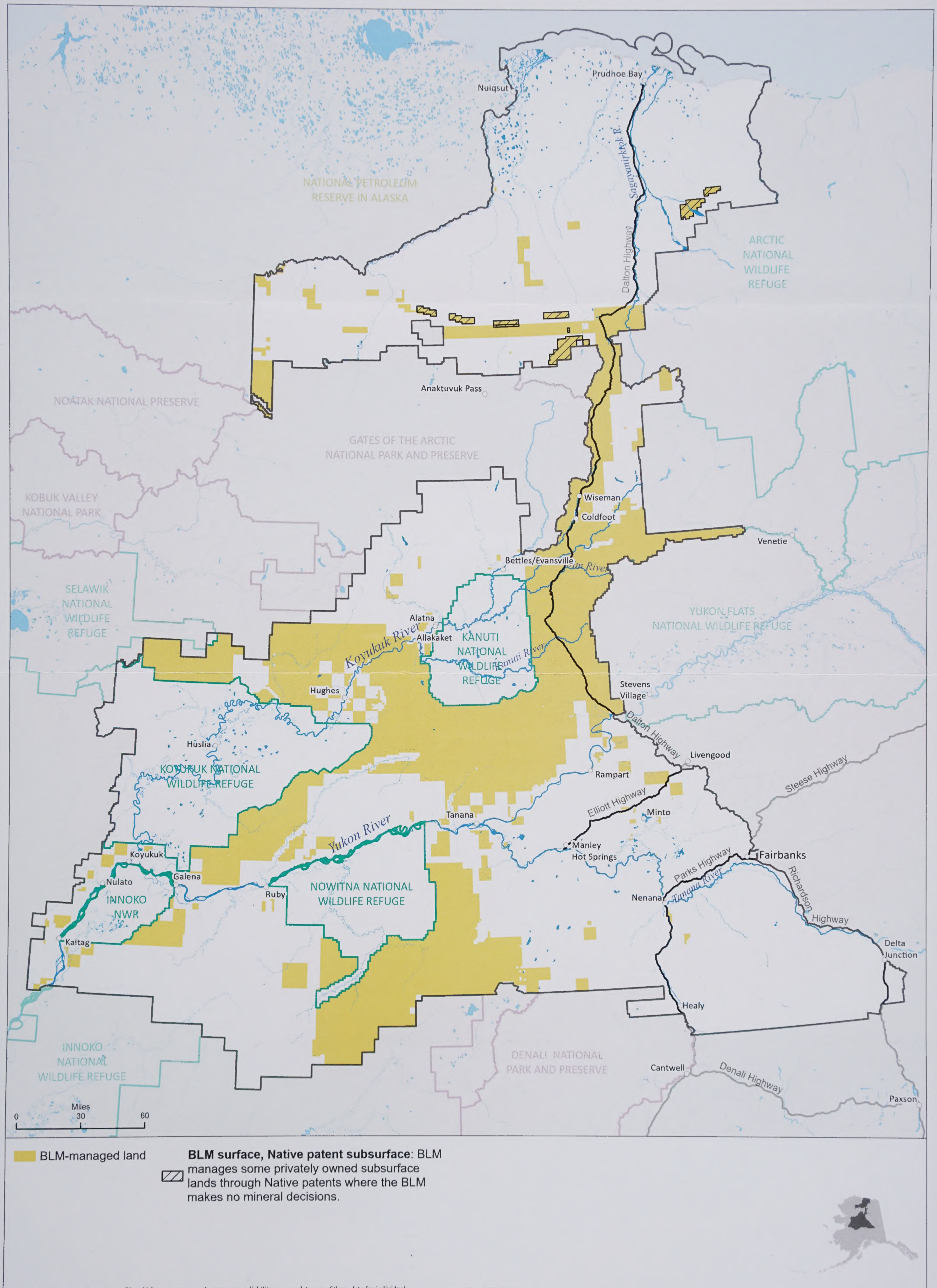
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 1.1

Print Date: 11/07/2024

Decision Area


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
Rampart
Steese Highway
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Galena
Richardson Highway
Nulato
Tanana River
Nenana
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟨 BLM-managed land

▨ **BLM surface, Native patent subsurface**: BLM manages some privately owned subsurface lands through Native patents where the BLM makes no mineral decisions.

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

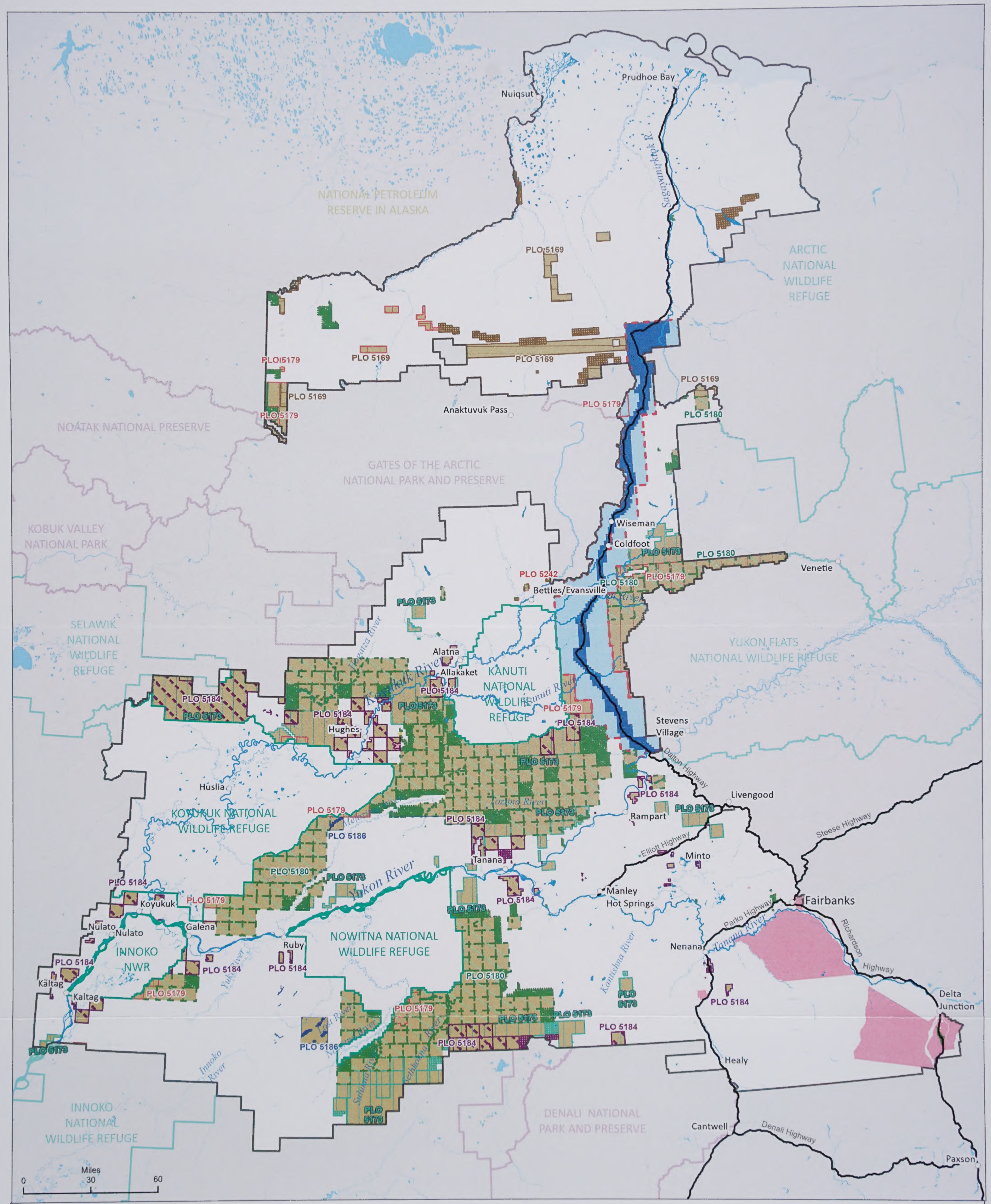
Data Source: BLM GIS 2017

Map 1.2

Print Date: 11/07/2024

Public Land Order Withdrawal

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
PLO 5169
PLO 5179
PLO 5180
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
SELAWIK NATIONAL WILDLIFE REFUGE
Wiseman
Coldfoot
PLO 5173
PLO 5242
Bettles/Evansville
Venetie
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
Kanuti River
KANUTI NATIONAL WILDLIFE REFUGE
PLO 5184
Hughes
Stevens Village
Dalton Highway
Livengood
Rampart
Steese Highway
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Melozitna River
PLO 5186
Tozitna River
Tanana
Elliott Highway
Minto
Manley Hot Springs
Fairbanks
Yukon River
Koyukuk
Galena
Nulato
NOWITNA NATIONAL WILDLIFE REFUGE
Ruby
INNOKO NWR
Kaltag
Kantishna River
Nenana
Parks Highway
Tanana River
Richardson Highway
Delta Junction
Healy
Innoko River
INNOKO NATIONAL WILDLIFE REFUGE
Sulukna River
Nowitna River
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

- Dalton Utility Corridor Public Land Order (PLO) 5150 (inner and outer corridor)
- PLO 5150 outer utility corridor
- PLO 5150 inner utility corridor

ANCSA 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

- PLO 5169
- PLO 5179
- PLO 5184
- PLO 5242
- PLO 5173
- PLO 5180
- PLO 5186
- BLM lands under PLOs in Draft EIS
- BLM-managed lands
- Withdrawn to the Department of Defense, withdrawal remains intact

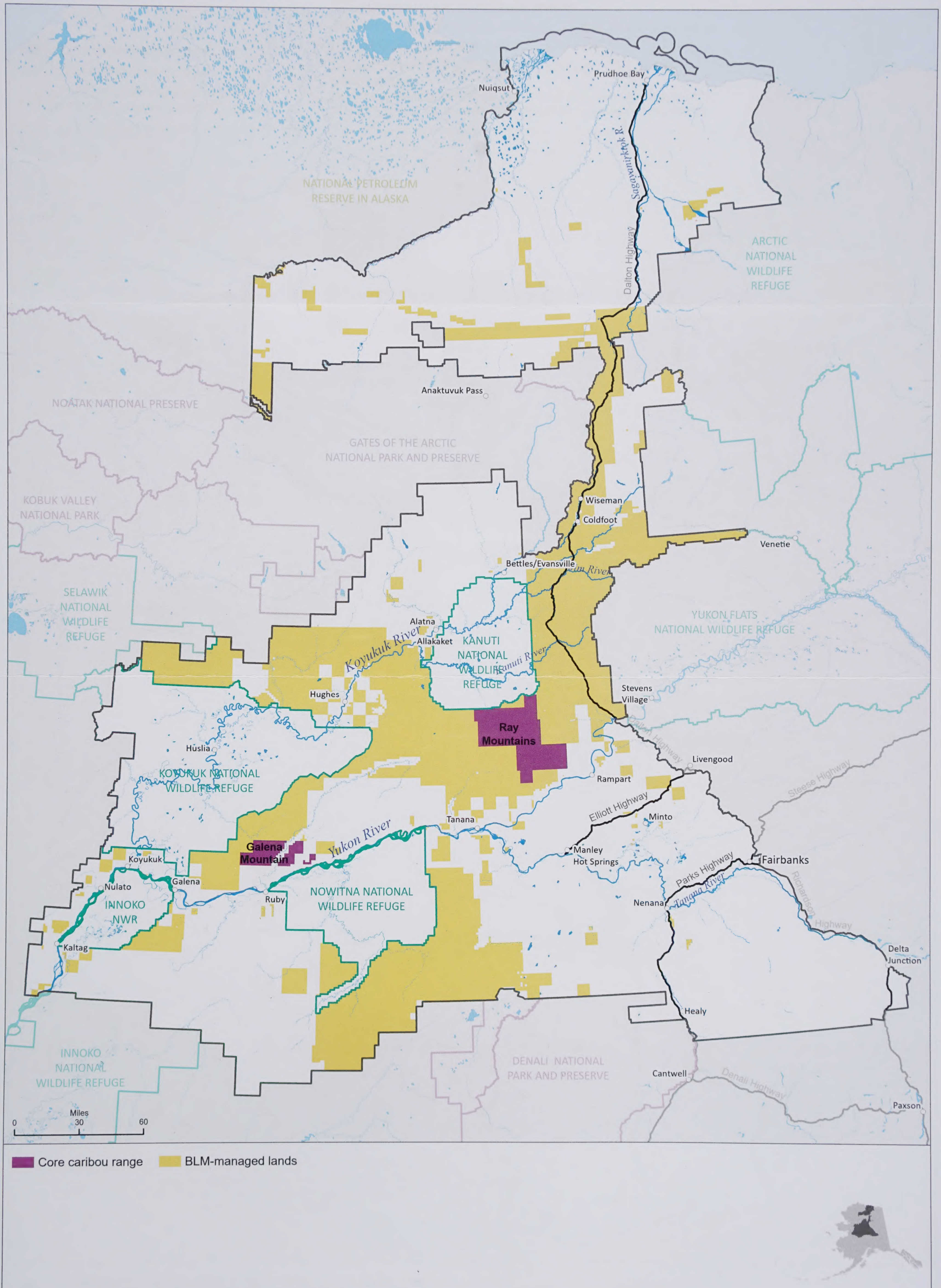
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 1.3

Print Date: 11/07/2024

Alternative E: Core Caribou Ranges


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Ray Mountains
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Livengood
Rampart
Steese Highway
Elliott Highway
Tanana
Minto
Galena Mountain
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Richardson Highway
Nulato
INNOKO NWR
Ruby
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

▬ Core caribou range
▬ BLM-managed lands

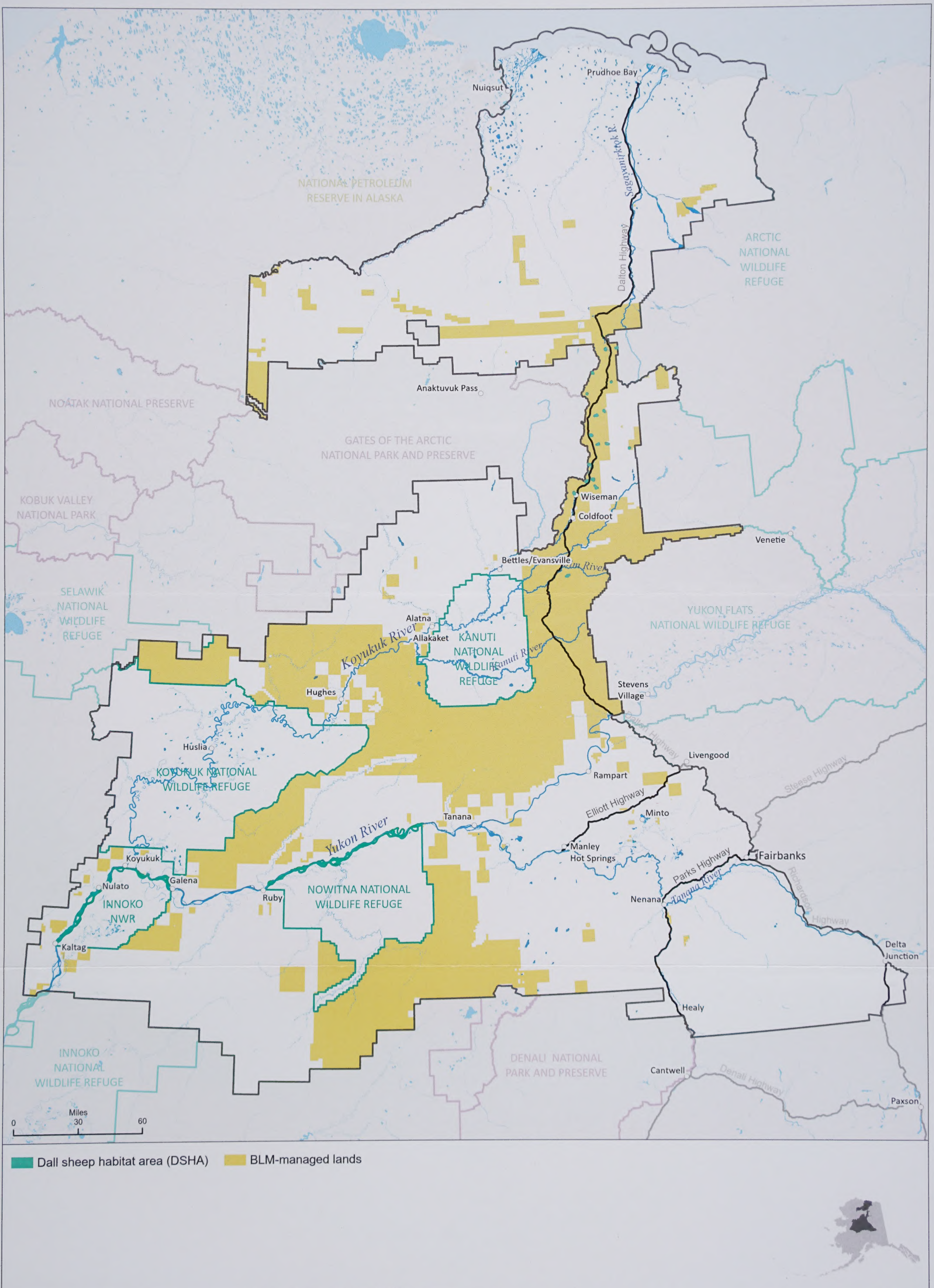
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.1

Print Date: 11/07/2024

Alternative E: Dall Sheep


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Huslia
Livengood
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Parks Highway
Tanana River
Richardson Highway
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟩 Dall sheep habitat area (DSHA)

🟨 BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

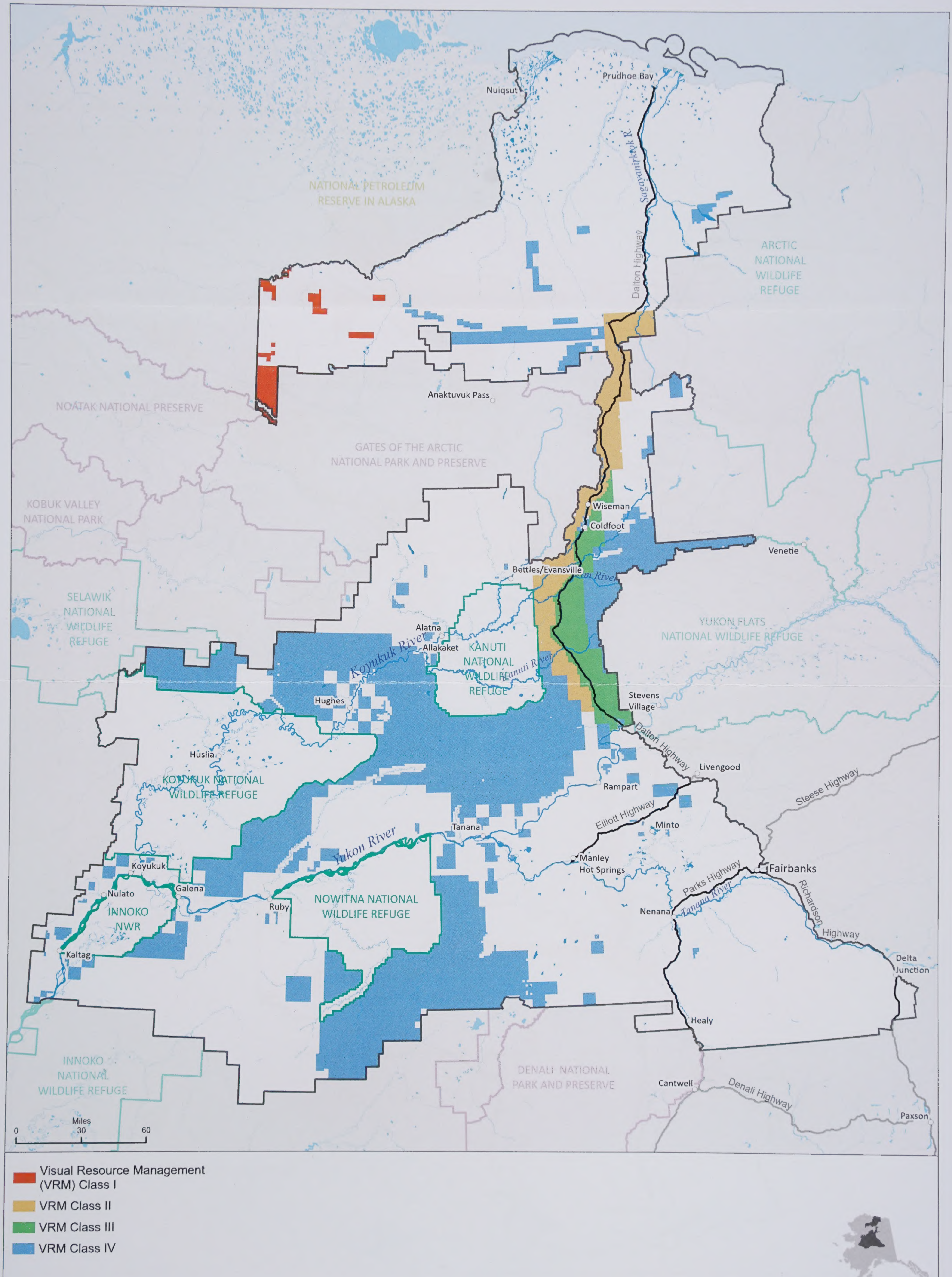
Data Source: BLM GIS 2017

Map 2.2

Print Date: 11/07/2024

Alternative E: Visual Resource Management

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Stevens Village
Hughes
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Livengood
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Nenana
Richardson Highway
Delta Junction
Kaltag
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
🟥 Visual Resource Management (VRM) Class I
🟨 VRM Class II
🟩 VRM Class III
🟦 VRM Class IV

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

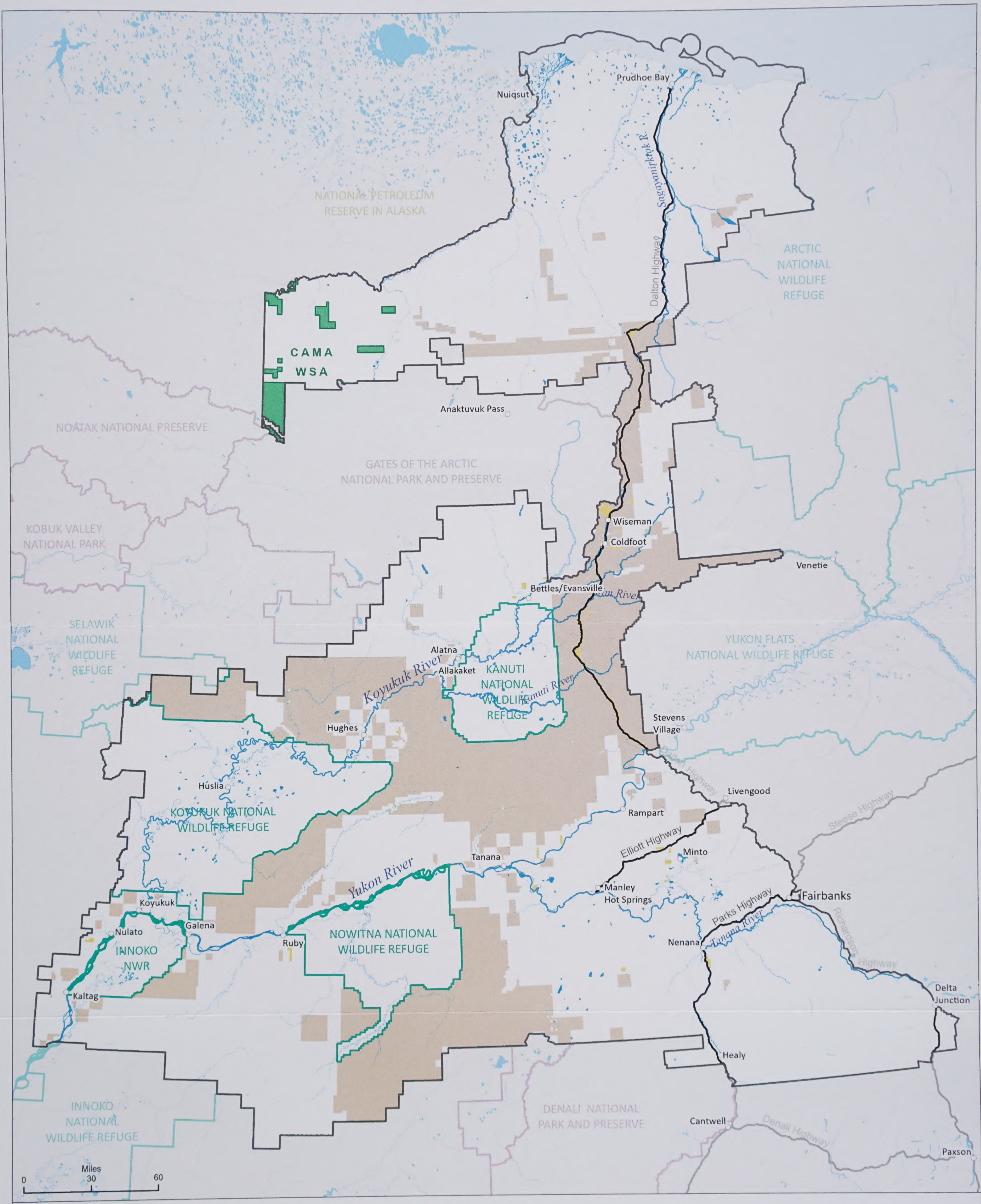
Data Source: BLM GIS 2017

Map 2.3

Print Date: 11/07/2024

Alternative E: Lands with Wilderness Characteristics

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
CAMA
WSA
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
River
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Steese Highway
Rampart
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Parks Highway
Tanana River
Richardson Highway
Koyukuk
Galena
Nulato
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

▨ Lands with wilderness characteristics managed to emphasize other resource values and multiple uses

🟩 Central Arctic Management Area (CAMA) Existing Wilderness Study Area (WSA)

🟨 BLM-managed lands without wilderness characteristics

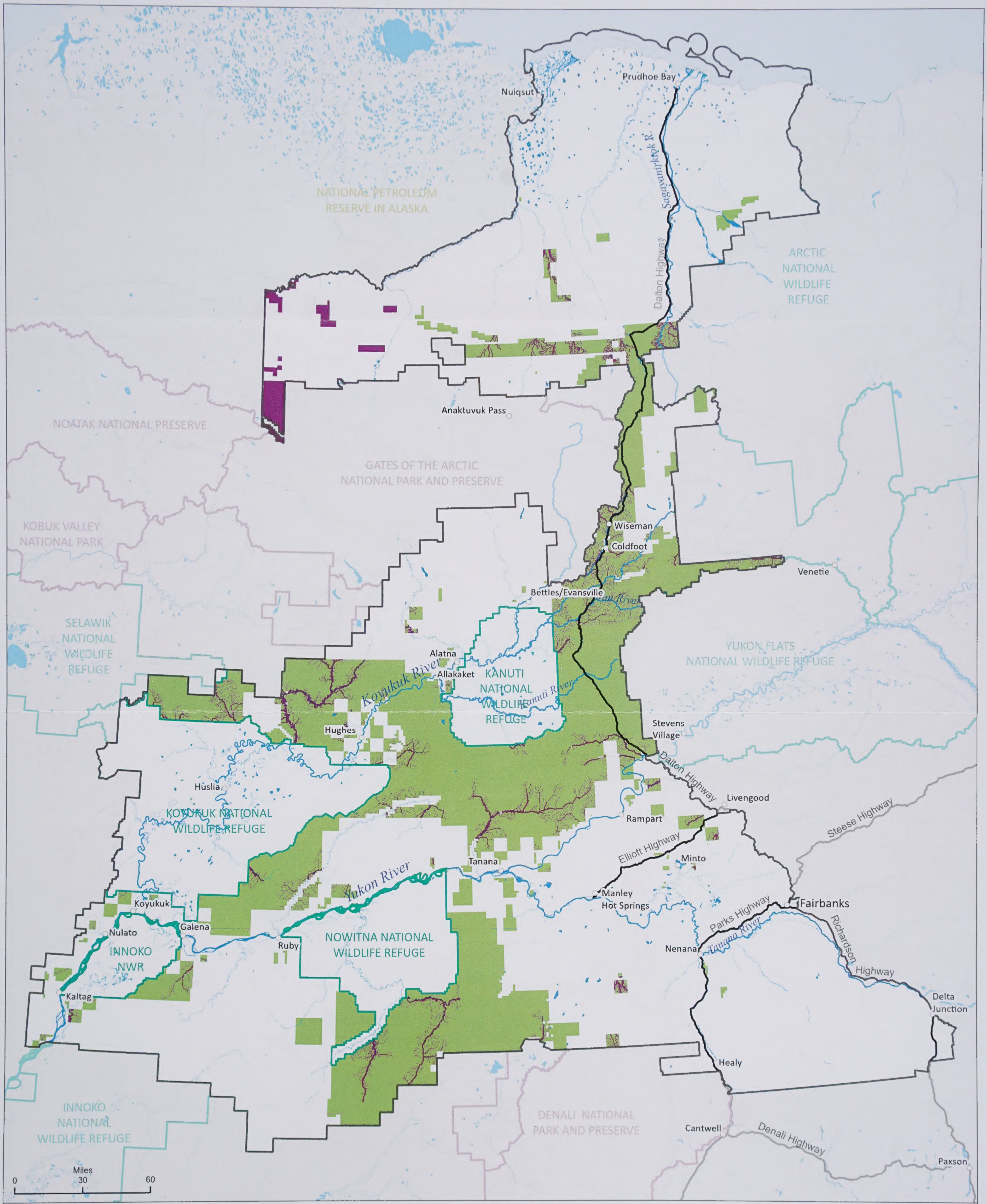
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.4

Print Date: 11/07/2024

Alternative E: Forestry


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Parks Highway
Richardson Highway
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Tanana River
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟪 Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

🟩 Open to commercial timber development, open to non-subsistence collection of live vegetation

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

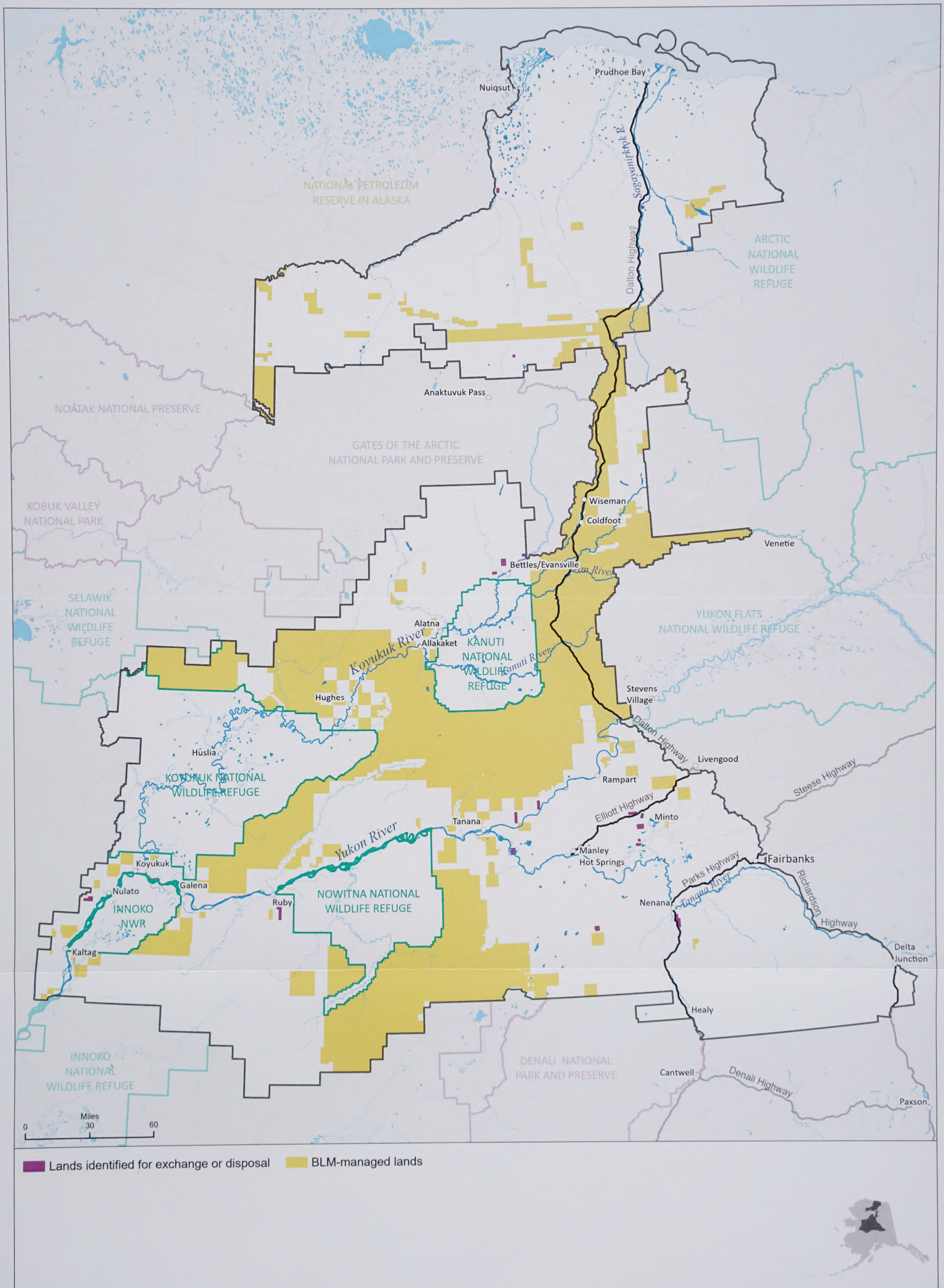
Data Source: BLM GIS 2017

Map 2.5

Print Date: 11/07/2024

Alternative E: Land Tenure

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Dalton Highway
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Stevens Village
Hughes
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Dalton Highway
Livengood
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Richardson Highway
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
Lands identified for exchange or disposal
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

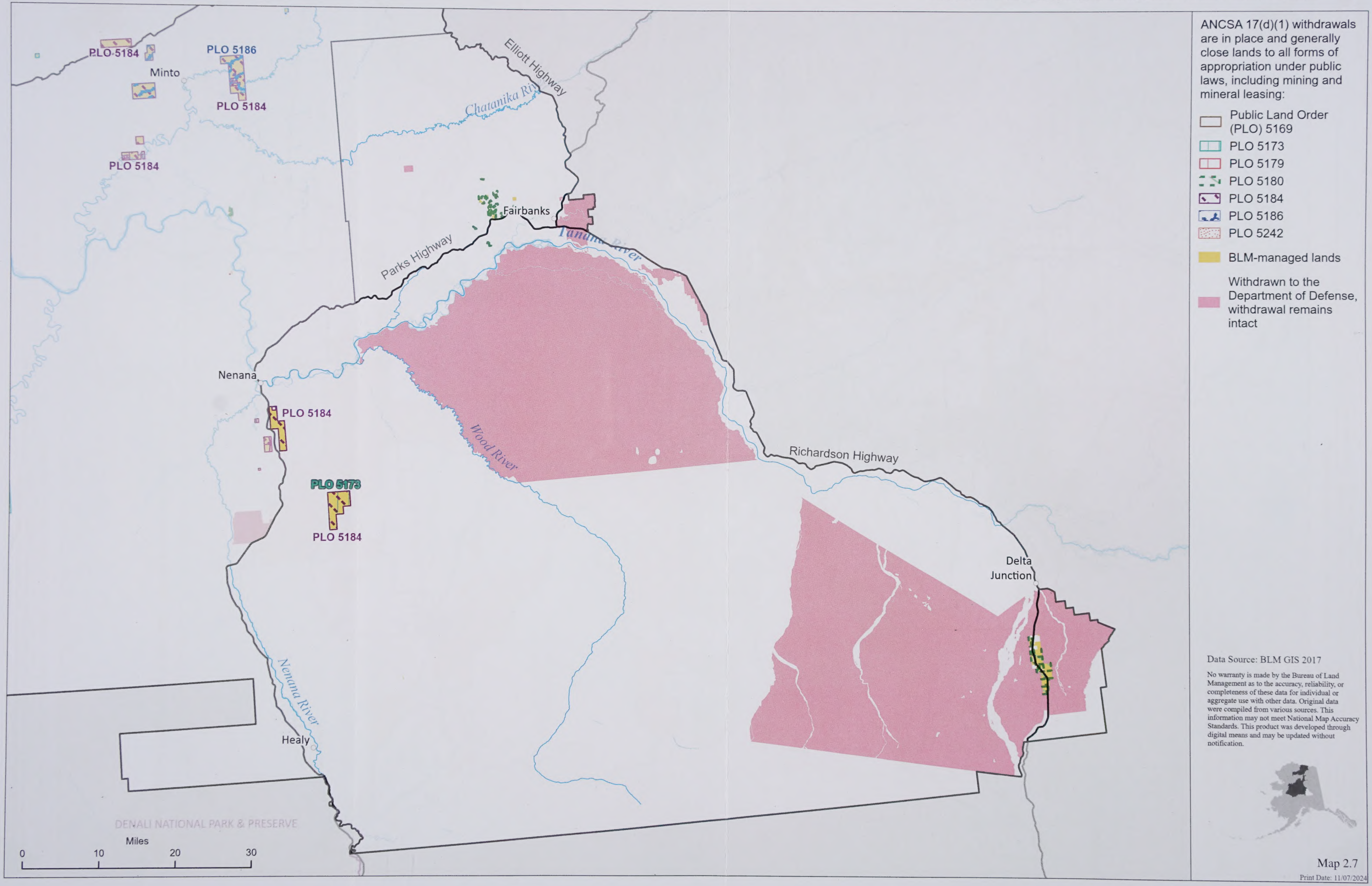
Data Source: BLM GIS 2017

Map 2.6

Print Date: 11/07/2024

Alternative E: Public Land Order Withdrawals
Fairbanks Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


PLO 5184
PLO 5186
Minto
PLO 5184
PLO 5184
Chatanika River
Elliott Highway
Fairbanks
Tanana River
Parks Highway
Nenana
PLO 5184
Wood River
Richardson Highway
PLO 5173
PLO 5184
Delta Junction
Nenana River
Healy
DENALI NATIONAL PARK & PRESERVE
Miles
0
10
20
30
ANCSA 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:
Public Land Order (PLO) 5169
PLO 5173
PLO 5179
PLO 5180
PLO 5184
PLO 5186
PLO 5242
BLM-managed lands
Withdrawn to the Department of Defense, withdrawal remains intact

Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

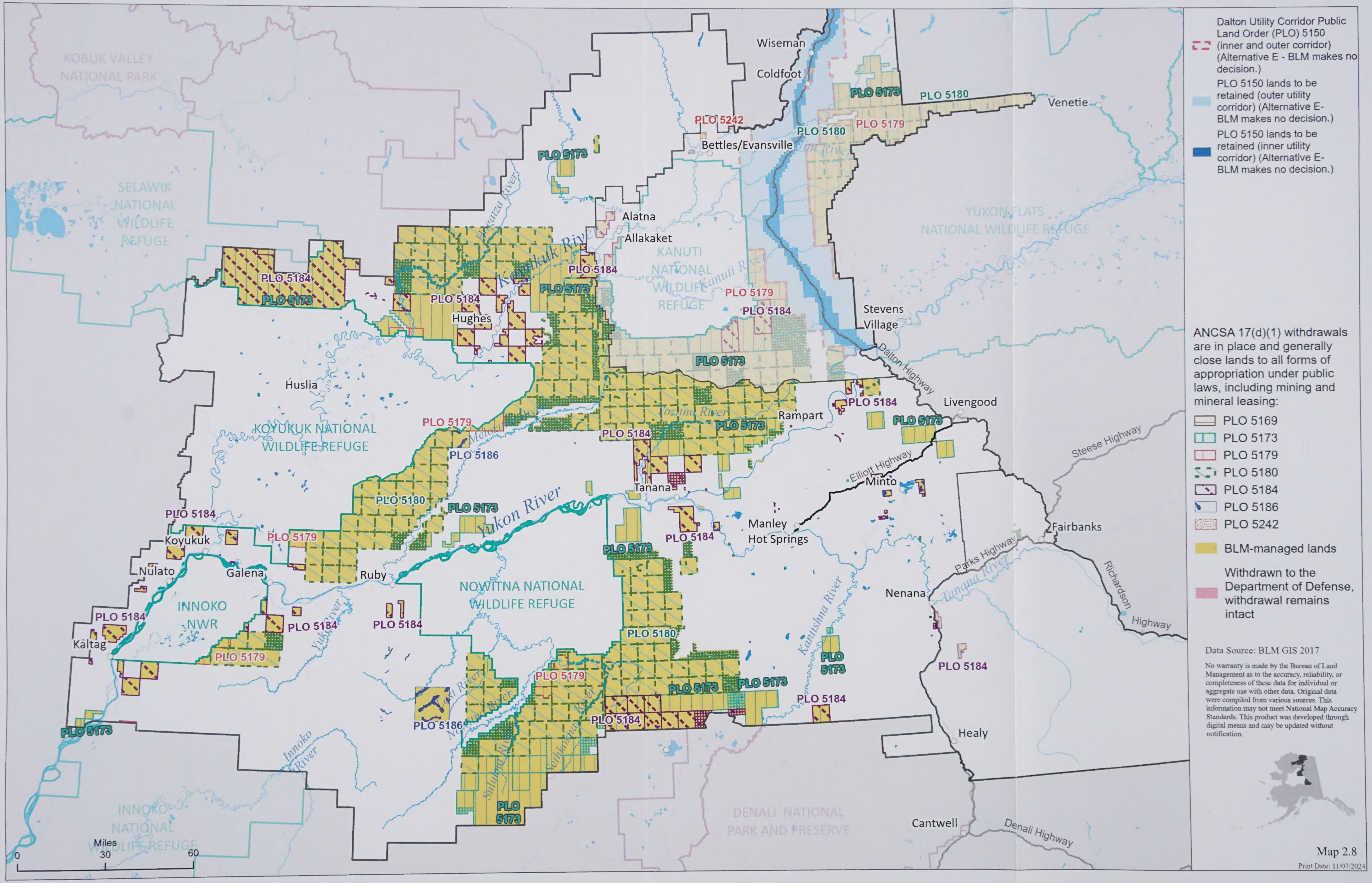
Map 2.7

Print Date: 11/07/2024

Alternative E: Public Land Order Withdrawals

Middle Yukon Drainages Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Dalton Utility Corridor Public Land Order (PLO) 5150 (inner and outer corridor) (Alternative E - BLM makes no decision.)
PLO 5150 lands to be retained (outer utility corridor) (Alternative E- BLM makes no decision.)
PLO 5150 lands to be retained (inner utility corridor) (Alternative E- BLM makes no decision.)
PLO 5169
PLO 5173
PLO 5179
PLO 5180
PLO 5184
PLO 5186
PLO 5242
BLM-managed lands
Withdrawn to the Department of Defense, withdrawal remains intact
KOBUK VALLEY NATIONAL PARK
SELAWIK NATIONAL WILDLIFE REFUGE
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
KOYUKUK NATIONAL WILDLIFE REFUGE
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Wiseman
Coldfoot
Bettles/Evansville
Venetie
Alatna
Allakaket
Hughes
Stevens Village
Huslia
Livengood
Rampart
Tanana
Minto
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
Ruby
Kaltag
Nenana
Healy
Cantwell
Koyukuk River
Yukon River
Kanuti River
Hogatza River
Melozitna River
Tozitna River
Nowitna River
Kantishna River
Tanana River
Yukon River
Innoko River
Sulatna River
Dalton Highway
Elliott Highway
Steese Highway
Parks Highway
Richardson Highway
Denali Highway
PLO 5173
PLO 5180
PLO 5179
PLO 5242
PLO 5184
PLO 5186
Miles
0
30
60

ANCSA 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

Data Source: BLM GIS 2017

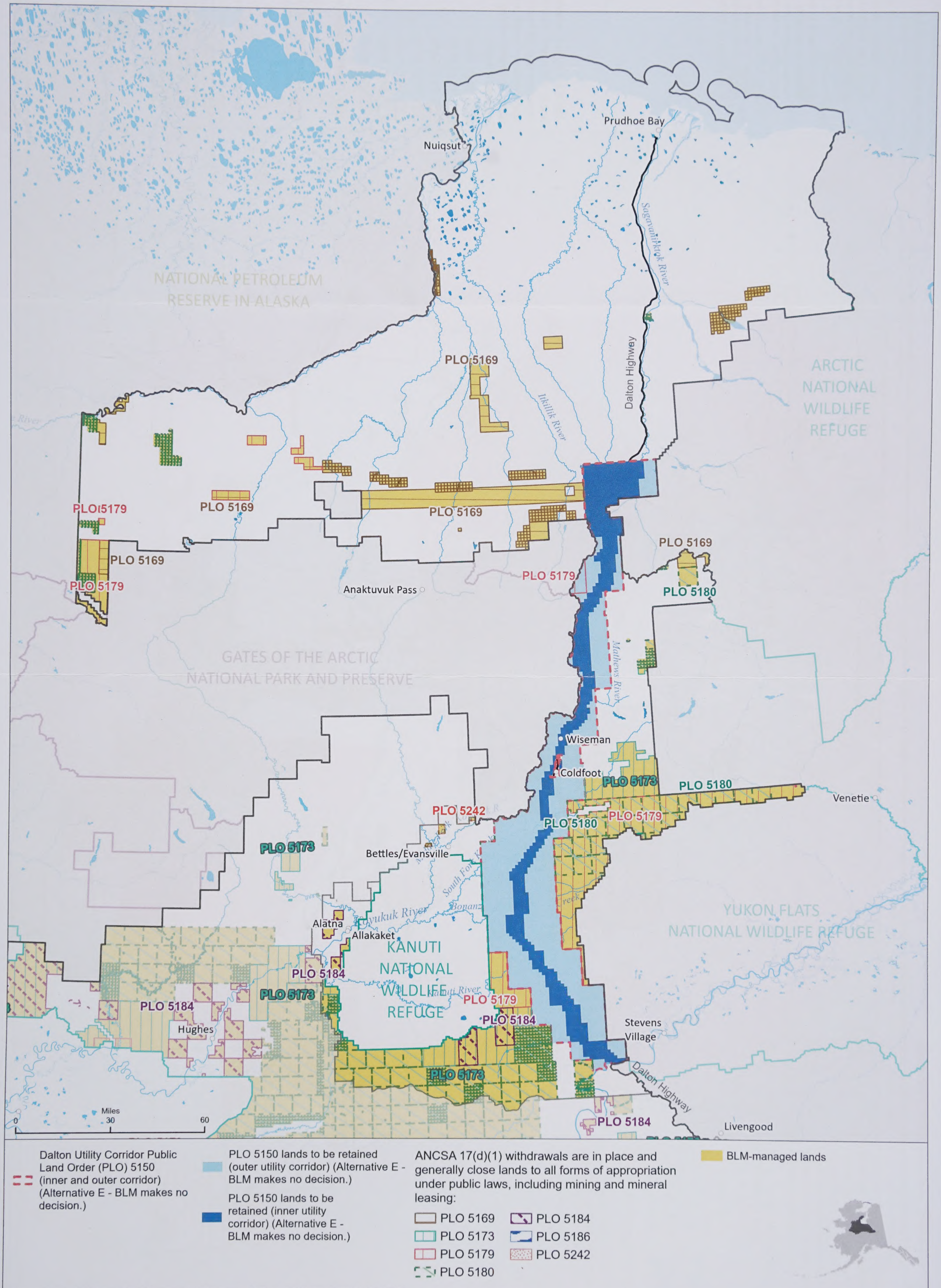
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 2.8

Print Date: 11/07/2024

Alternative E: Public Land Order Withdrawals

Utility Corridor Subunit


Prudhoe Bay
Nuiqsut
NATIONAL PETROLEUM RESERVE IN ALASKA
Sagavanirktok River
Dalton Highway
Itkillik River
ARCTIC NATIONAL WILDLIFE REFUGE
PLO 5169
PLO 5169
PLO 5169
PLO 5169
PLO 5169
PLO 5179
PLO 5179
PLO 5179
PLO 5180
Anaktuvuk Pass
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Mathews River
Wiseman
Coldfoot
PLO 5173
PLO 5180
Venetie
PLO 5179
PLO 5180
PLO 5242
PLO 5173
Bettles/Evansville
South Fork
Bonanza
Koyukuk River
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
PLO 5184
PLO 5173
PLO 5184
Hughes
PLO 5179
PLO 5184
PLO 5173
YUKON FLATS NATIONAL WILDLIFE REFUGE
Stevens Village
Dalton Highway
PLO 5184
Livengood
Miles
0
30
60
Dalton Utility Corridor Public Land Order (PLO) 5150 (inner and outer corridor) (Alternative E - BLM makes no decision.)
PLO 5150 lands to be retained (outer utility corridor) (Alternative E - BLM makes no decision.)
PLO 5150 lands to be retained (inner utility corridor) (Alternative E - BLM makes no decision.)
ANCSA 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:
PLO 5169
PLO 5173
PLO 5179
PLO 5180
PLO 5184
PLO 5186
PLO 5242
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

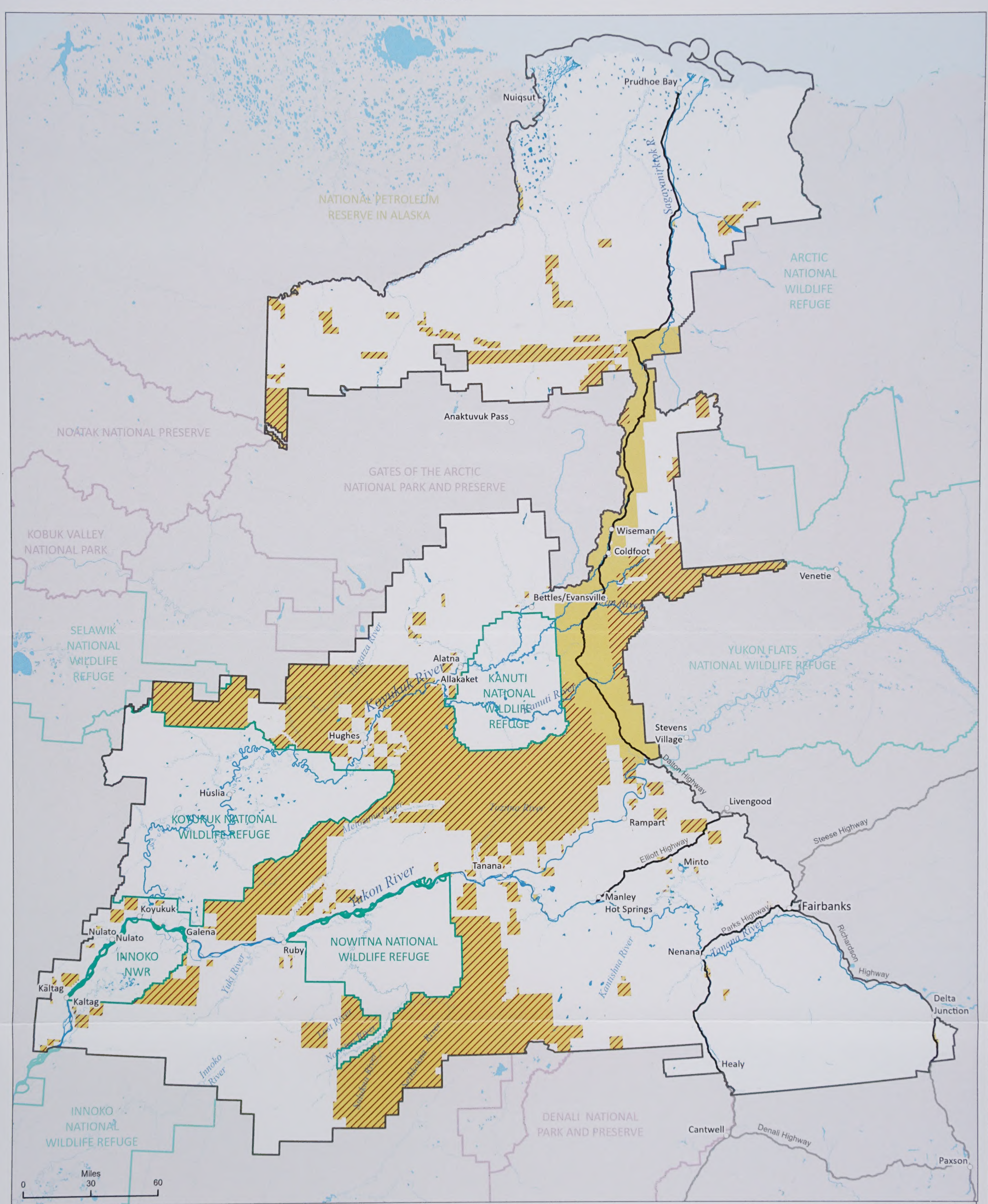
Data Source: BLM GIS 2017

Map 2.9

Print Date: 11/07/2024

Alternative E: Recommend Partial Revocation of ANCSA 17(d)(1) Withdrawals for Allotment Selection by Alaska Native Vietnam-era Veterans

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Hogatza River
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Stevens Village
Dalton Highway
Hughes
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Melozitna River
Tozitna River
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
Parks Highway
Richardson Highway
Tanana River
Nenana
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Yuki River
Kantishna River
Kaltag
Delta Junction
Lost River
Nowitna River
Sulukna River
Innoko River
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

▨ Recommend partial revocation of ANCSA 17(d)(1) withdrawals for allotment selection by Alaska Native Vietnam-era veterans

🟨 BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

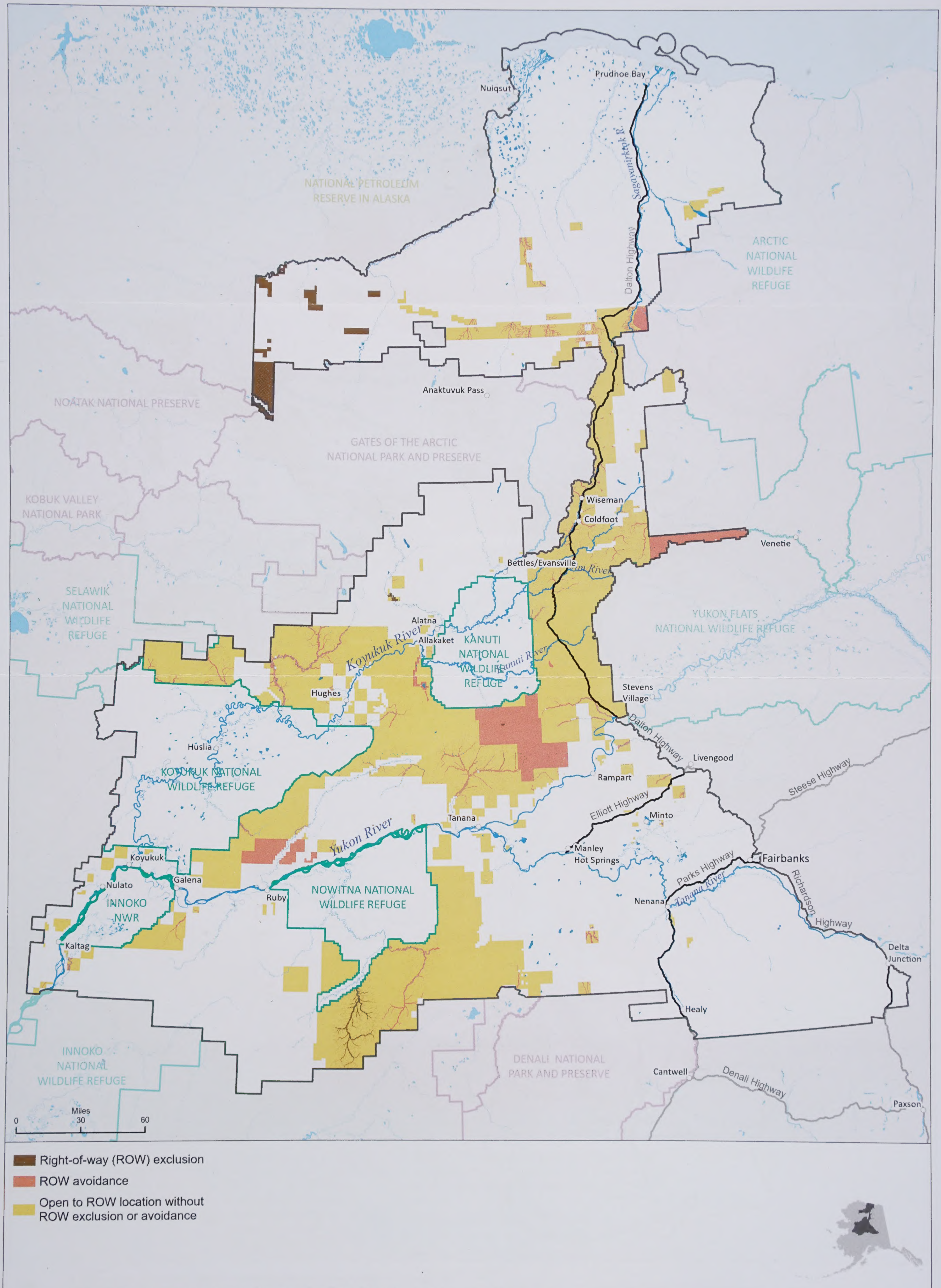
Data Source: BLM GIS 2017

Map 2.10

Print Date: 11/07/2024

Alternative E: Right-of-Way Allocations

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Livengood
Rampart
Steese Highway
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Parks Highway
Tanana River
Richardson Highway
Koyukuk
Nulato
Galena
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
Right-of-way (ROW) exclusion
ROW avoidance
Open to ROW location without ROW exclusion or avoidance

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

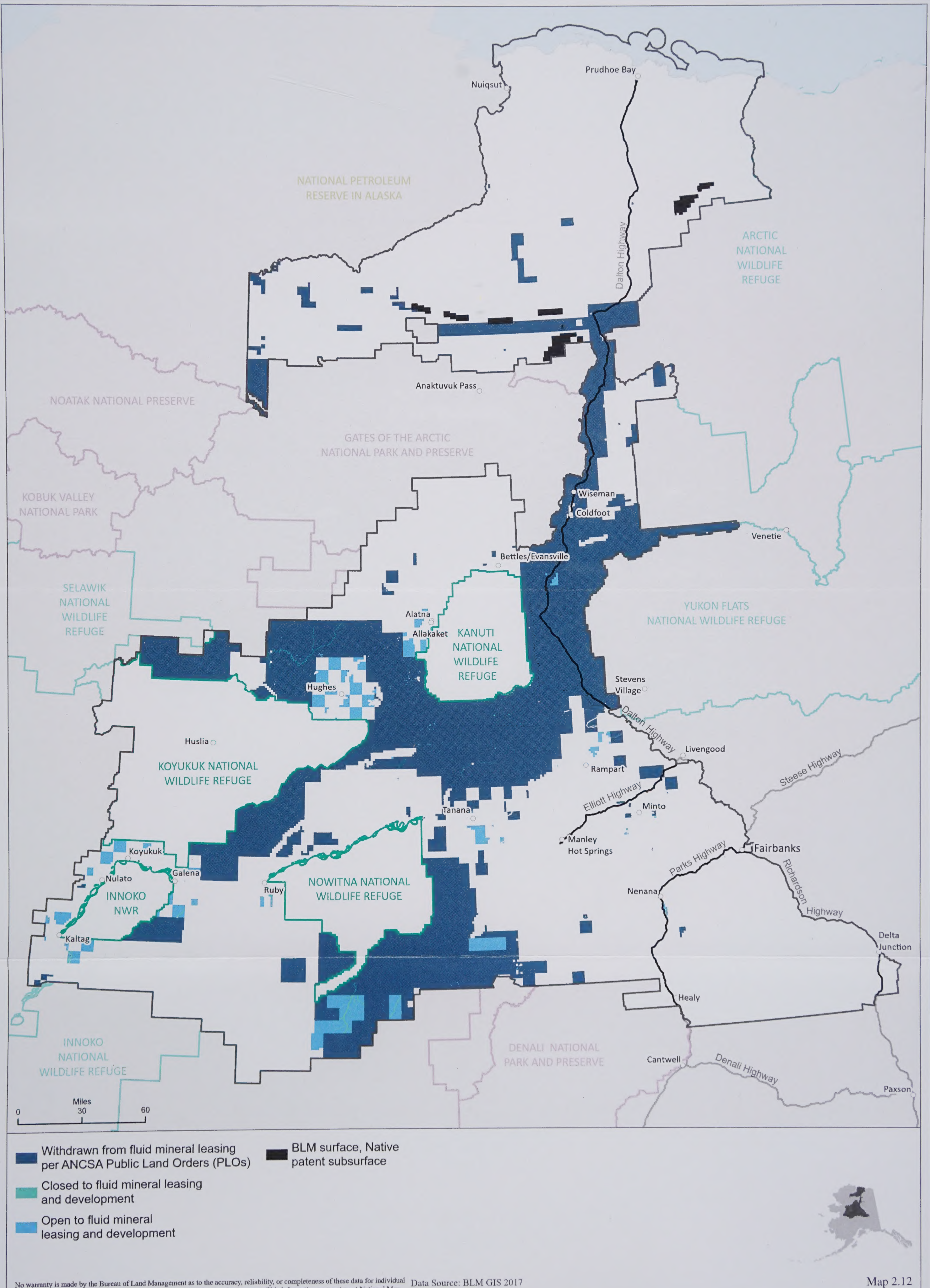
Data Source: BLM GIS 2017

Map 2.11

Print Date: 11/07/2024

Alternative E: Fluid Mineral Leasing

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
NATIONAL PETROLEUM RESERVE IN ALASKA
Dalton Highway
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Richardson Highway
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

■ Withdrawn from fluid mineral leasing per ANCSA Public Land Orders (PLOs)	■ BLM surface, Native patent subsurface
■ Closed to fluid mineral leasing and development	
■ Open to fluid mineral leasing and development	

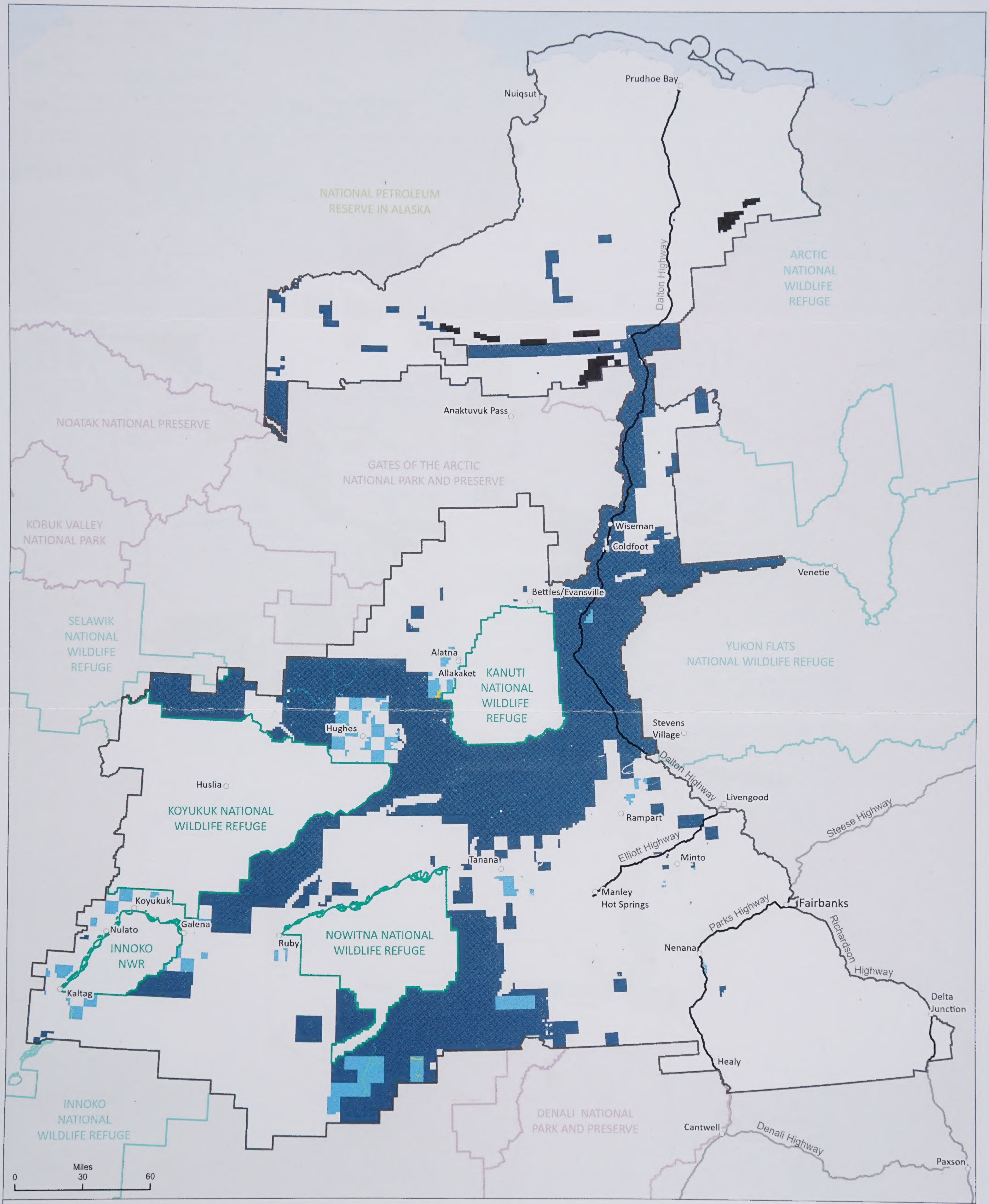
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.12

Print Date: 11/07/2024

Alternative E: Fluid Mineral Leasing, No Surface Occupancy


Prudhoe Bay
Nuiqsut
NATIONAL PETROLEUM RESERVE IN ALASKA
Dalton Highway
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Huslia
Dalton Highway
Livengood
Rampart
Steese Highway
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Tanana
Minto
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Richardson Highway
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

- 🟦 Withdrawn from fluid mineral leasing per ANCSA Public Land Orders (PLOs)
- 🟩 Closed to fluid mineral leasing and development
- 🟦 Open to fluid mineral leasing and development
- 🟨 Open to fluid mineral leasing subject to no surface occupancy
- ⬛ BLM surface, Native patent subsurface

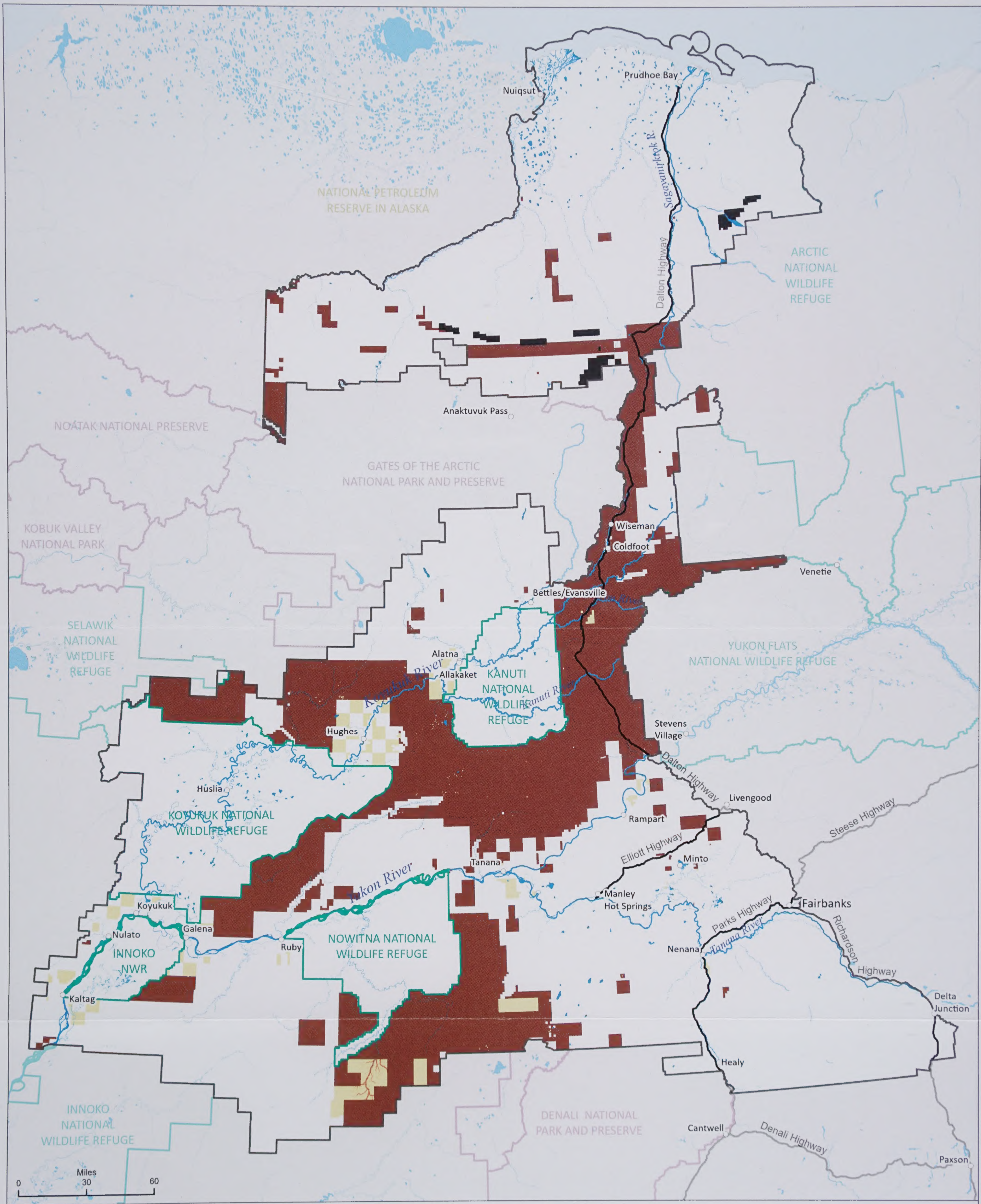
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.13

Print Date: 11/07/2024

Alternative E: Nonenergy Solid Leasable Minerals


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Steese Highway
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Parks Highway
Tanana River
Richardson Highway
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟫 Closed to nonenergy solid mineral leasing per ANCSA Public Land Orders (PLOs)

🟧 Closed to nonenergy solid mineral leasing and development

🟨 Open to nonenergy solid mineral leasing and development

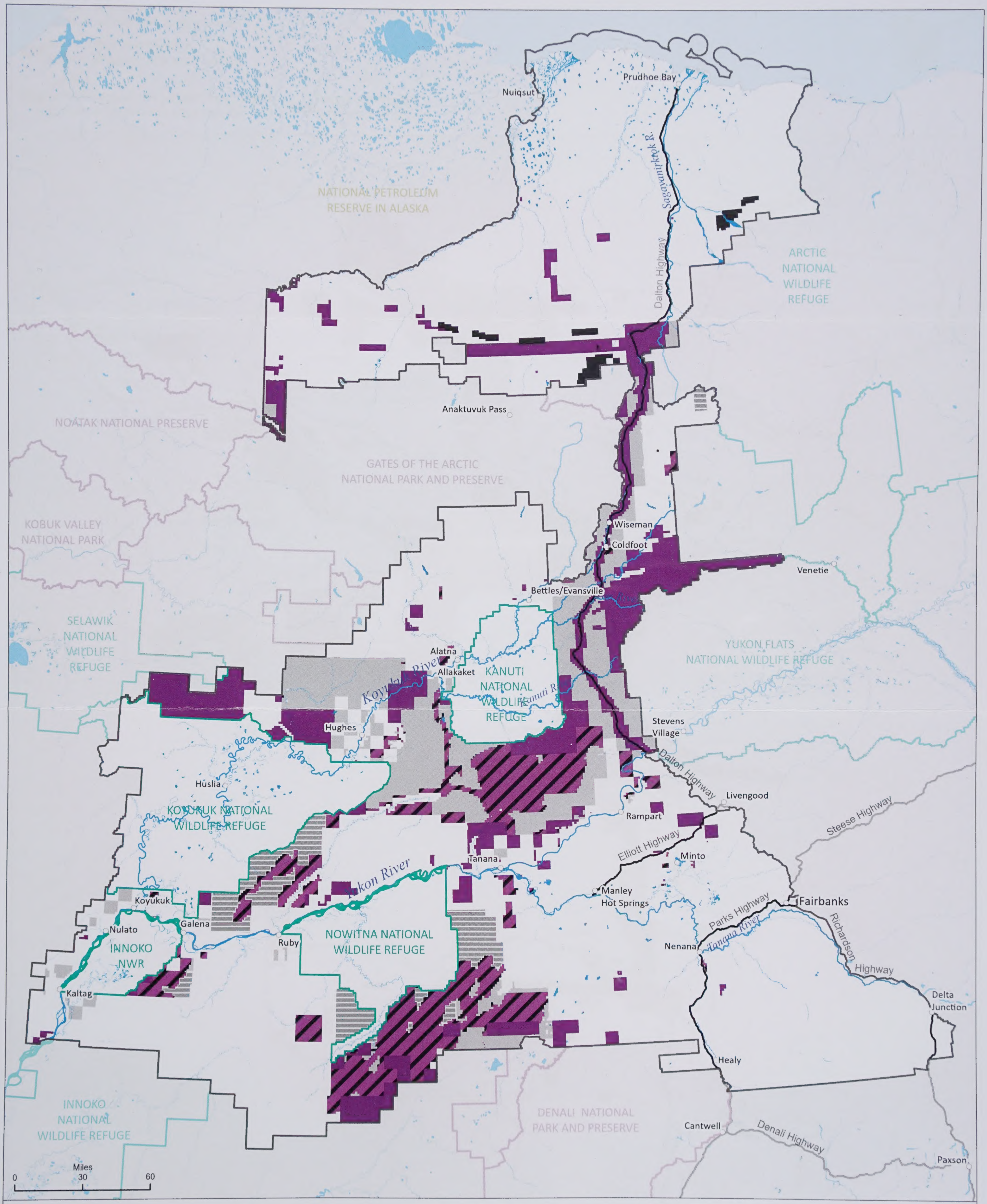
⬛ BLM surface, Native patent subsurface

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.14

Print Date: 11/07/2024


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti R.
Hughes
Stevens Village
Dalton Highway
Huslia
Livengood
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Richardson Highway
Tanana River
Galena
Nulato
NOWITNA NATIONAL WILDLIFE REFUGE
Ruby
Nenana
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

■	Currently withdrawn from locatable mineral entry and metalliferous mineral entry
▨	Open but currently selected and therefore segregated
■	BLM surface, Native patent subsurface
■	Open to locatable mineral entry including metalliferous
▤	Currently withdrawn from locatable mineral entry but open to metalliferous (and therefore effectively open, does not contain effective selections)

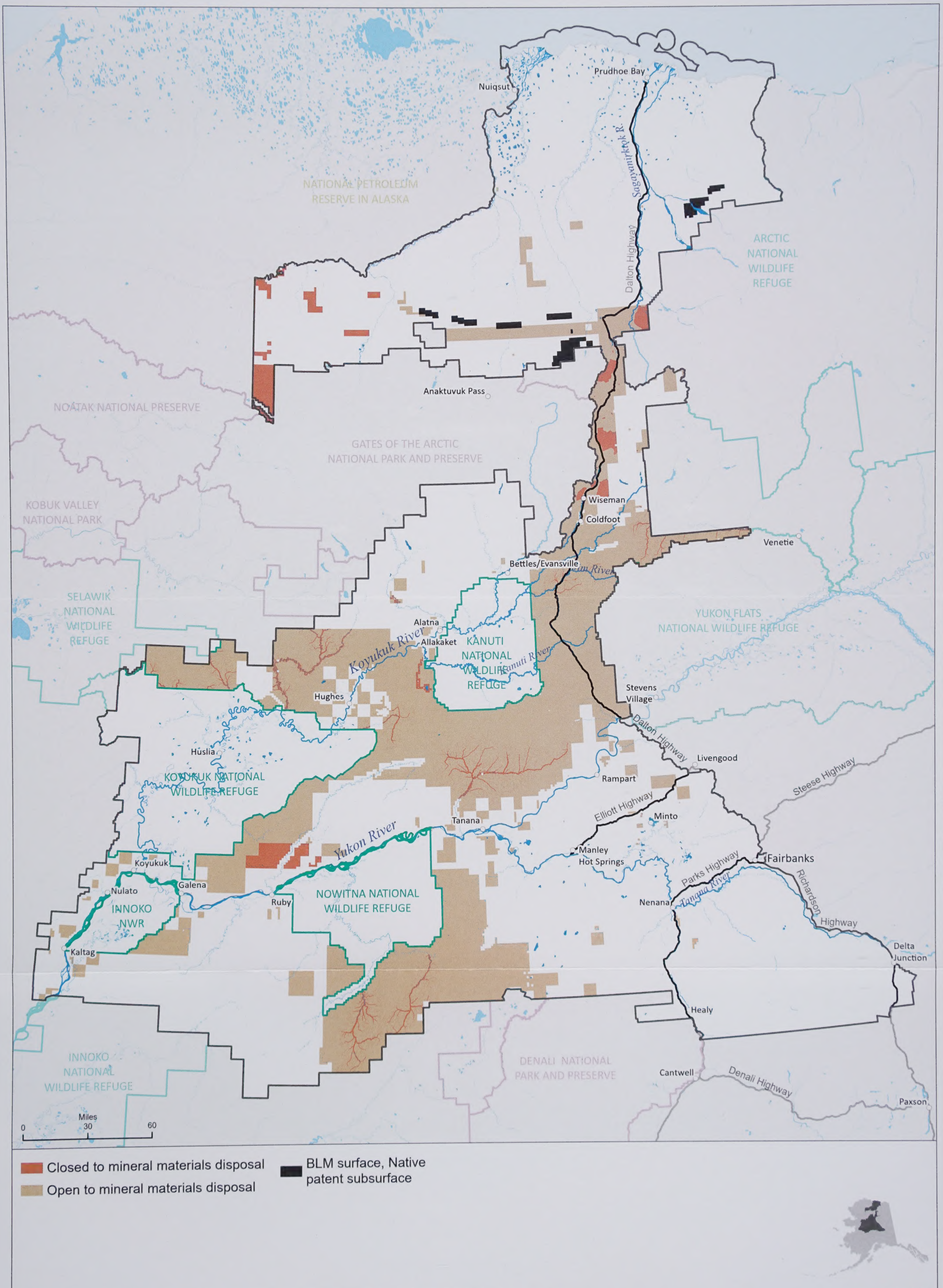
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.15

Print Date: 11/07/2024

Alternative E: Mineral Materials


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
River
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Tanana River
Richardson Highway
Nulato
Galena
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
INNOKO NWR
Ruby
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
🟥 Closed to mineral materials disposal
🟫 Open to mineral materials disposal
■ BLM surface, Native patent subsurface

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

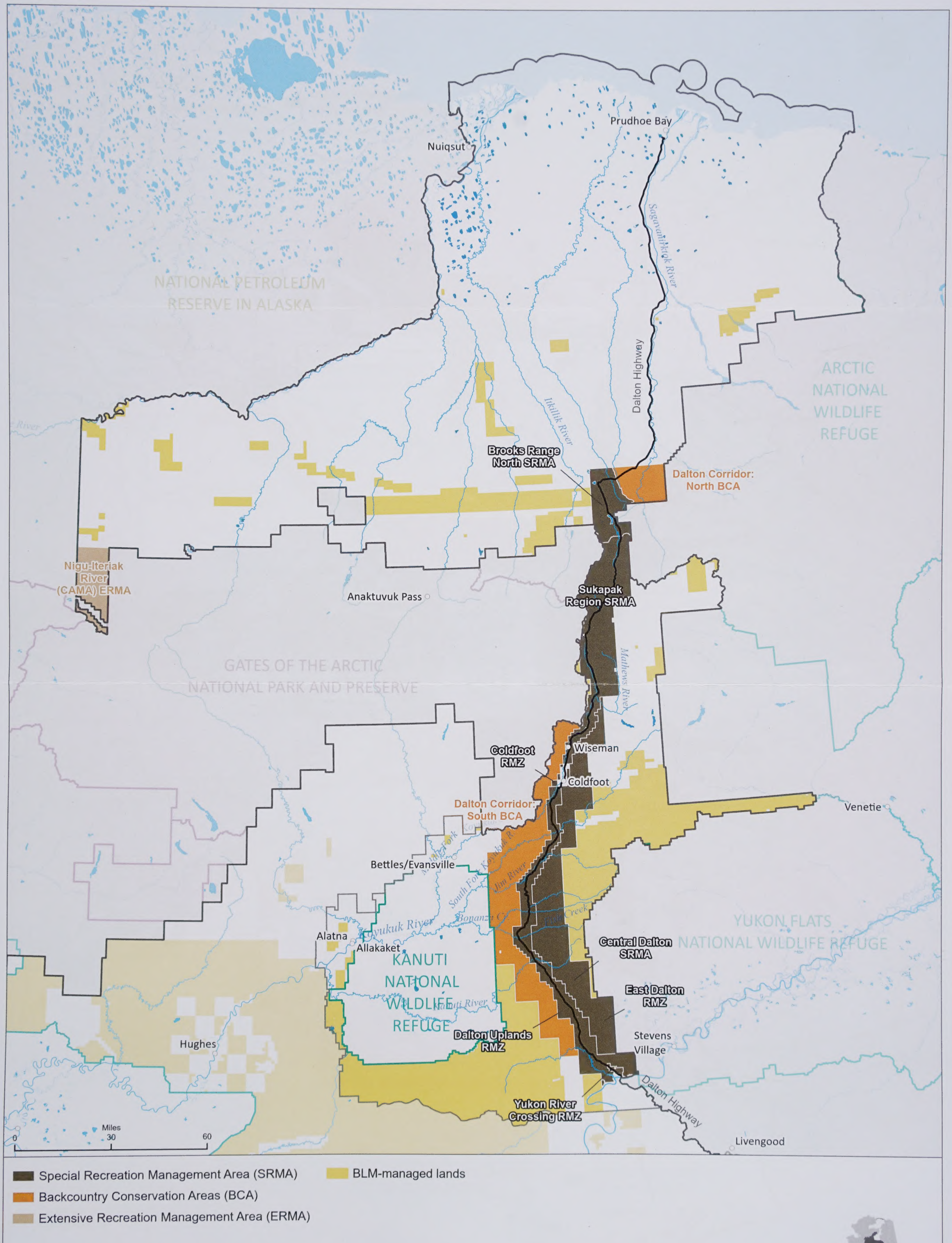
Map 2.16

Print Date: 11/07/2024

Alternative E: Recreation

Utility Corridor Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok River
NATIONAL PETROLEUM RESERVE IN ALASKA
Dalton Highway
Itkillik River
ARCTIC NATIONAL WILDLIFE REFUGE
Brooks Range North SRMA
Dalton Corridor: North BCA
River
Nigu-Iteriak River (CAMA) ERMA
Anaktuvuk Pass
Sukapak Region SRMA
Mathews River
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Coldfoot RMZ
Wiseman
Coldfoot
Dalton Corridor: South BCA
Venetie
Bettles/Evansville
Middle Fork
Koyukuk R
South Fork
Jim River
Bonanza C
Fish Creek
Alatna
Koyukuk River
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Central Dalton SRMA
East Dalton RMZ
Stevens Village
Dalton Uplands RMZ
Hughes
Yukon River Crossing RMZ
Dalton Highway
Livengood
Miles
0
30
60
Special Recreation Management Area (SRMA)
Backcountry Conservation Areas (BCA)
Extensive Recreation Management Area (ERMA)
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

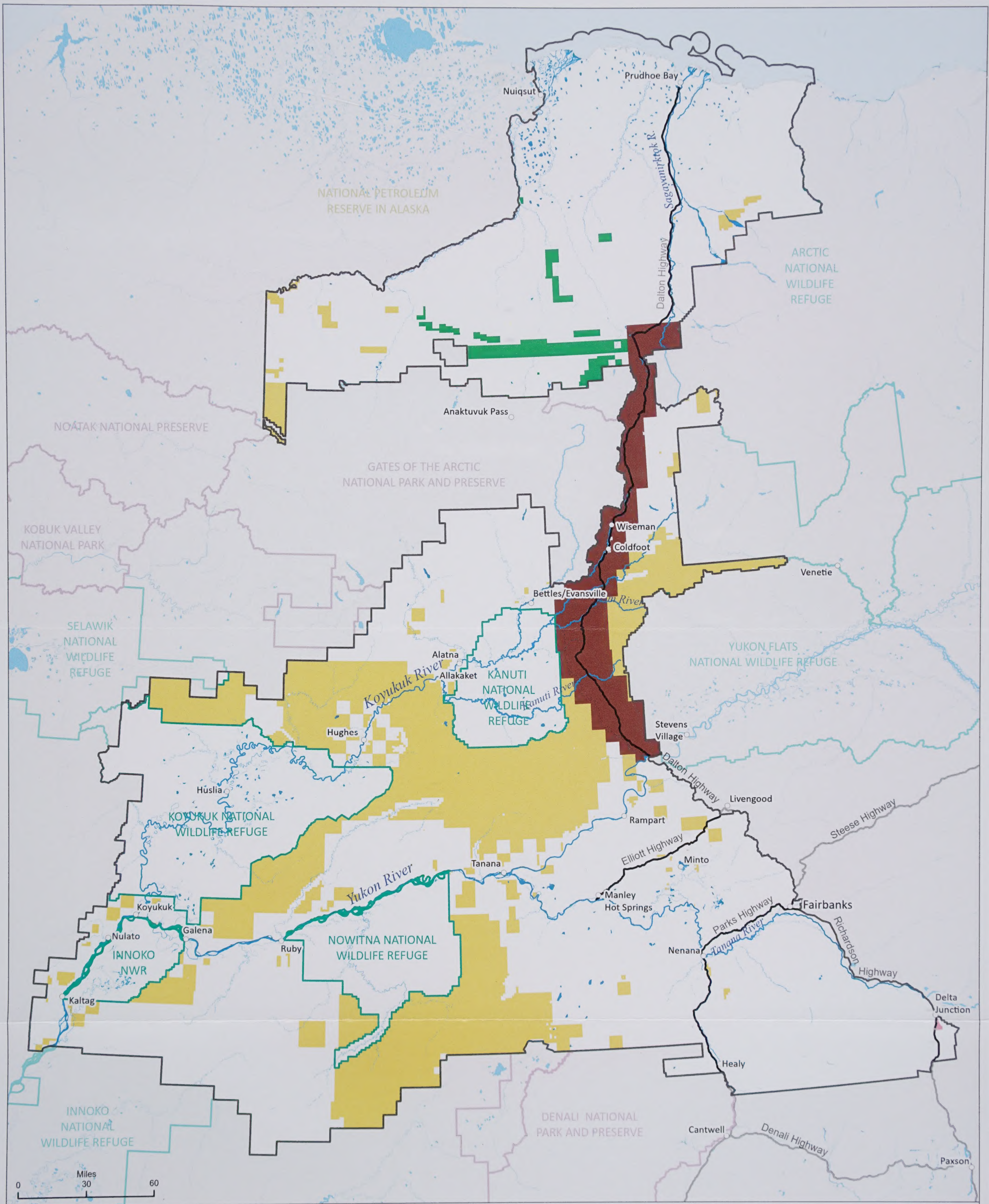
Data Source: BLM GIS 2017

Map 2.17

Print Date: 11/07/2024

Alternative E: Travel Management Areas

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Tanana River
Richardson Highway
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

Manage the following as Travel Management Areas (TMAs):

- 🟫 Dalton Corridor
- 🟩 Central Arctic Management Area (CAMA) lands outside the WSA
- 🟨 Rest of planning area
- 🟪 Fairbanks/Military Lands TMA

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

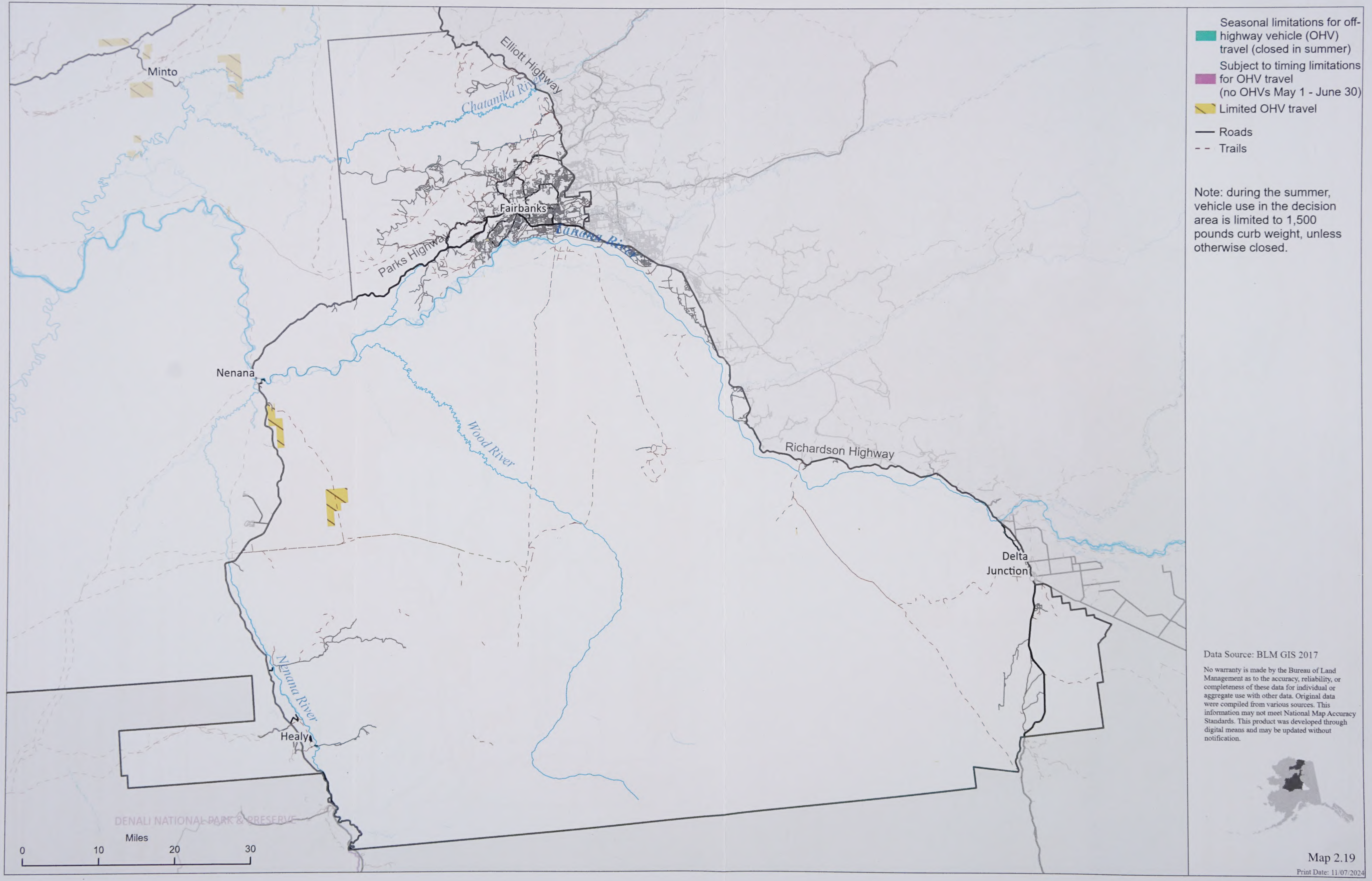
Map 2.18

Print Date: 11/07/2024

Alternative E: Travel and Transportation Management

Fairbanks Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Minto
Elliott Highway
Chatanika River
Fairbanks
Tanana River
Parks Highway
Nenana
Wood River
Richardson Highway
Delta Junction
Nenana River
Healy
DENALI NATIONAL PARK & PRESERVE
Miles
0
10
20
30
🟩 Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)
🟪 Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)
▨ Limited OHV travel
— Roads
- - Trails

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

Data Source: BLM GIS 2017

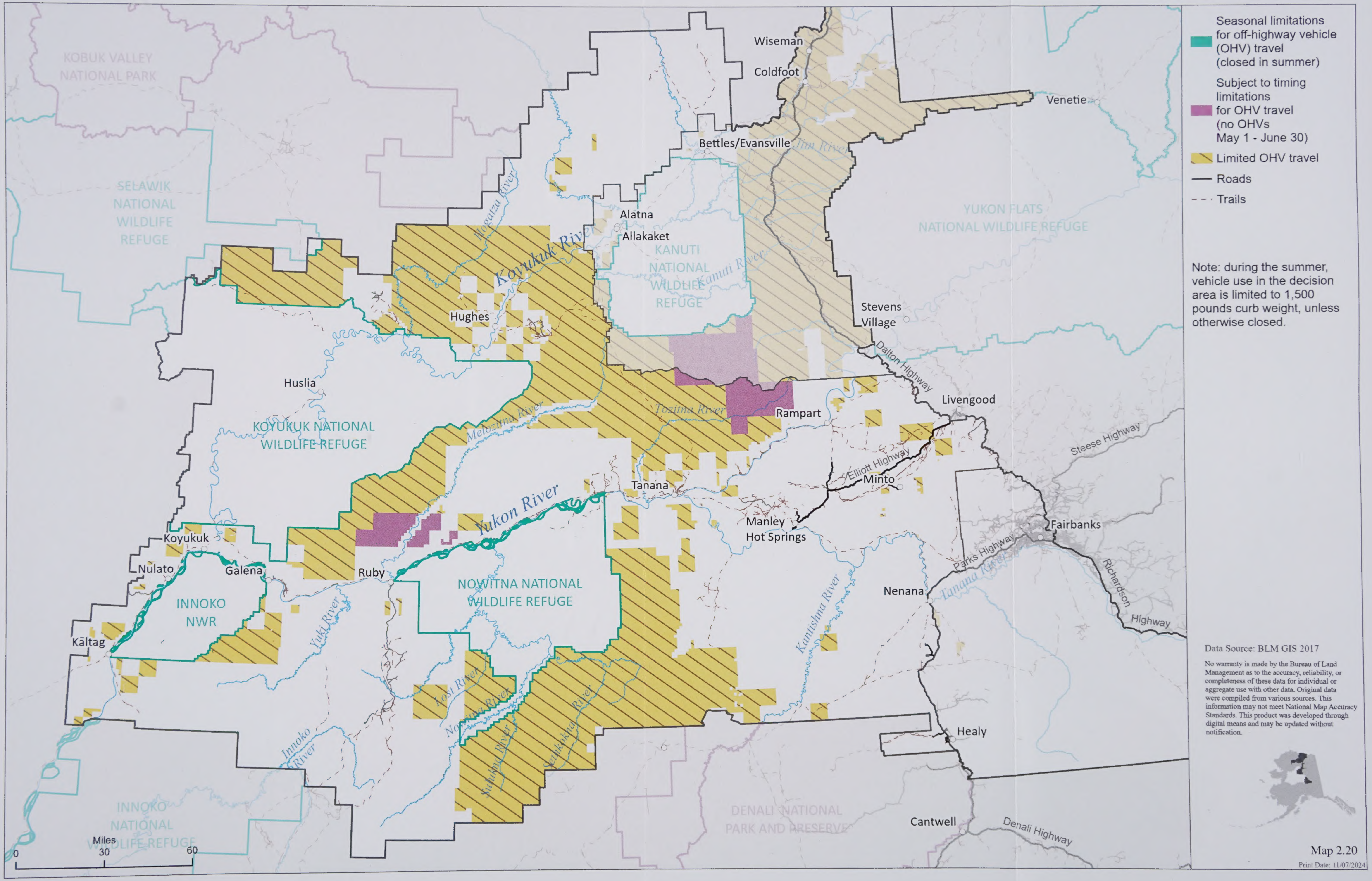
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 2.19

Print Date: 11/07/2024

Alternative E: Travel and Transportation Management

Middle Yukon Drainages Subunit



▨ Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)
▨ Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)
▨ Limited OHV travel
— Roads
- - - Trails
KOBUK VALLEY NATIONAL PARK
SELAWIK NATIONAL WILDLIFE REFUGE
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
KOYUKUK NATIONAL WILDLIFE REFUGE
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Wiseman
Coldfoot
Venetie
Bettles/Evansville
Jim River
Alatna
Allakaket
Hogatza River
Koyukuk River
Kanuti River
Hughes
Huslia
Stevens Village
Dalton Highway
Livengood
Tozitna River
Rampart
Melozitna River
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
Ruby
Parks Highway
Tanana River
Richardson Highway
Nenana
Kaltag
Yuki River
Kantishna River
Lost River
Nowitna River
Sulukna River
Innoko River
Cosna River
Zitziana River
Healy
Cantwell
Denali Highway
Miles
0
30
60

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

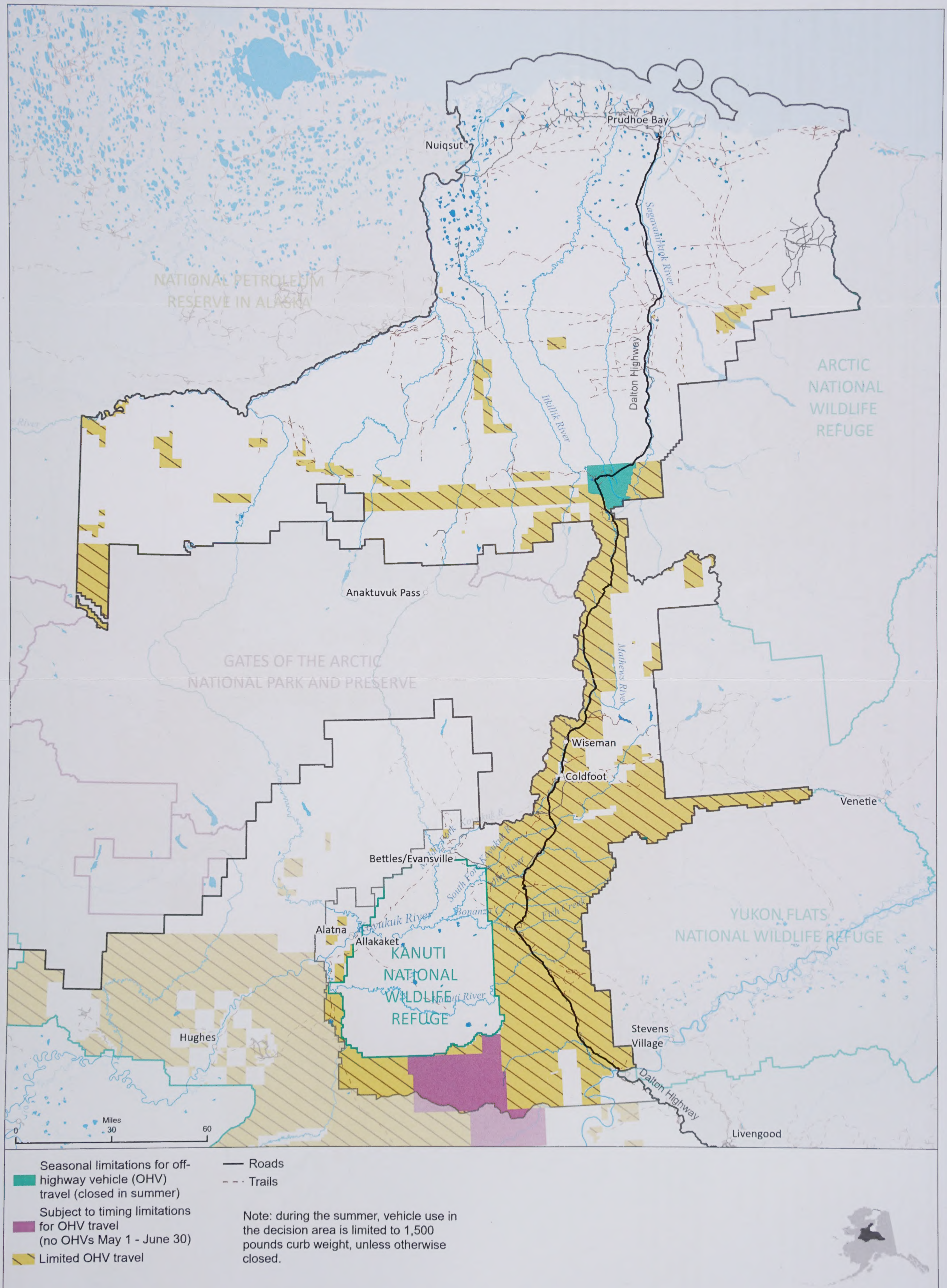
Map 2.20

Print Date: 11/07/2024

Alternative E: Travel and Transportation Management

Utility Corridor Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok River
Dalton Highway
Itkillik River
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Mathews River
Wiseman
Coldfoot
Venetie
Bettles/Evansville
Koyukuk River
South Fork Koyukuk R.
Bonanza
Fish Creek
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Miles
0
30
60
🟩 Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)
🟪 Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)
▨ Limited OHV travel
— Roads
- - - Trails

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

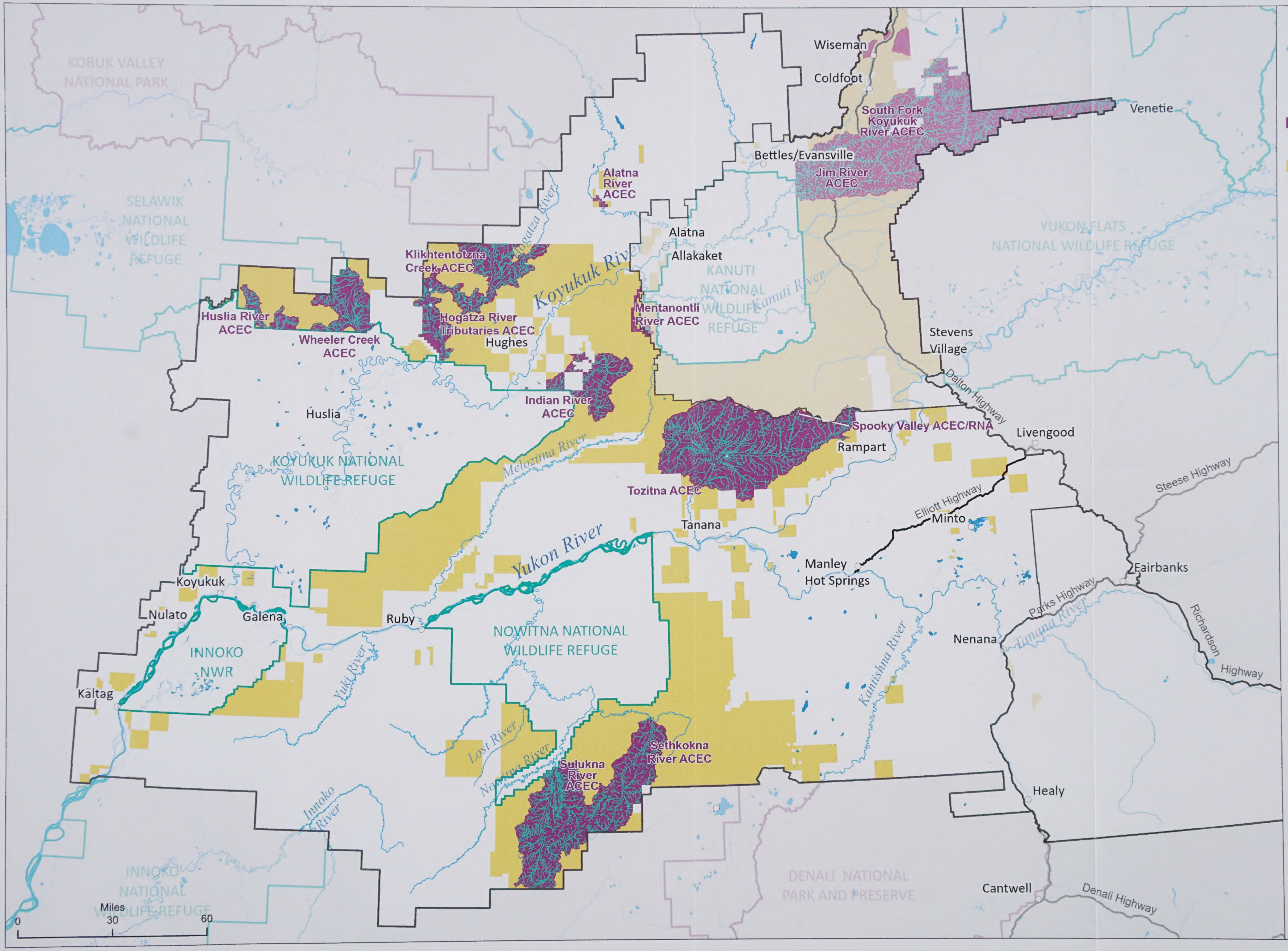
Map 2.21

Print Date: 11/07/2024

Alternative E: ACECs/RNAs

Middle Yukon Drainages Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS



KOBUK VALLEY NATIONAL PARK
SELAWIK NATIONAL WILDLIFE REFUGE
Wiseman
Coldfoot
South Fork Koyukuk River ACEC
Venetie
Bettles/Evansville
Jim River ACEC
Alatna River ACEC
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Klikhtentotzna Creek ACEC
Hogatza River
Koyukuk River
Huslia River ACEC
Wheeler Creek ACEC
Hogatza River Tributaries ACEC
Hughes
Mentanontli River ACEC
Stevens Village
Dalton Highway
Indian River ACEC
Spooky Valley ACEC/RNA
Livengood
Huslia
Rampart
Melozitna River
KOYUKUK NATIONAL WILDLIFE REFUGE
Tozitna ACEC
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Koyukuk
Manley Hot Springs
Fairbanks
Nulato
Galena
Ruby
Parks Highway
Tanana River
Richardson Highway
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
Nenana
Kaltag
Yuki River
Kantishna River
Lost River
Sethkokna River ACEC
Sulukna River ACEC
Nowitna River
Healy
Innoko River
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Miles
0
30
60

~ Within the ACEC, special management actions apply for stream order-based 100-year floodplain buffer areas

🟪 Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

🟨 BLM-managed lands

The BLM Navigability Recommendations Memo dated December 30, 1980 determined the Alatna River *navigable* to the mouth of Helpmejack Creek based upon use by paddlewheel steamer during the gold rush of 1898 and 1899. The state holds title to the bed of the Alatna River within the Proposed Alatna River ACEC.

Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

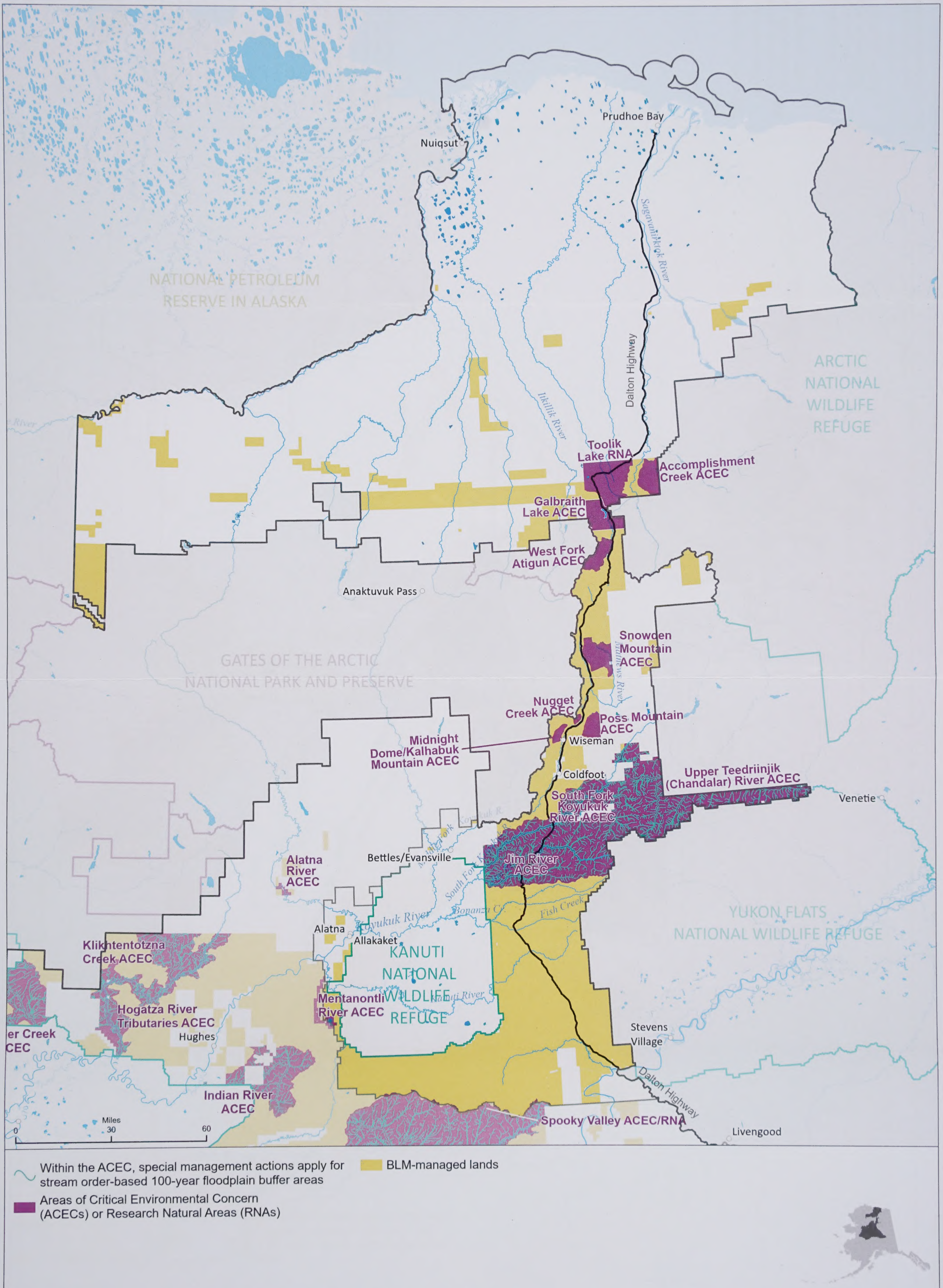
Map 2.22

Print Date: 11/07/2024

Alternative E: ACECs/RNAs

Utility Corridor Subunit

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok River
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Itkillik River
Toolik Lake RNA
Accomplishment Creek ACEC
Galbraith Lake ACEC
West Fork Atigun ACEC
Anaktuvuk Pass
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Snowden Mountain ACEC
Mathews River
Nugget Creek ACEC
Poss Mountain ACEC
Midnight Dome/Kalhabuk Mountain ACEC
Wiseman
Coldfoot
Upper Teedriinjik (Chandalar) River ACEC
Venetie
South Fork Koyukuk River ACEC
Alatna River ACEC
Bettles/Evansville
Jim River ACEC
South Fork
Bonanza Cr.
Fish Creek
Koyukuk River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
KANUTI NATIONAL WILDLIFE REFUGE
Klikhtentotzna Creek ACEC
Mentanontli River ACEC
Hogatza River Tributaries ACEC
Hughes
er Creek CEC
Stevens Village
Dalton Highway
Indian River ACEC
Spooky Valley ACEC/RNA
Livengood
Miles
0
30
60
River

~ Within the ACEC, special management actions apply for stream order-based 100-year floodplain buffer areas

▨ Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

🟨 BLM-managed lands

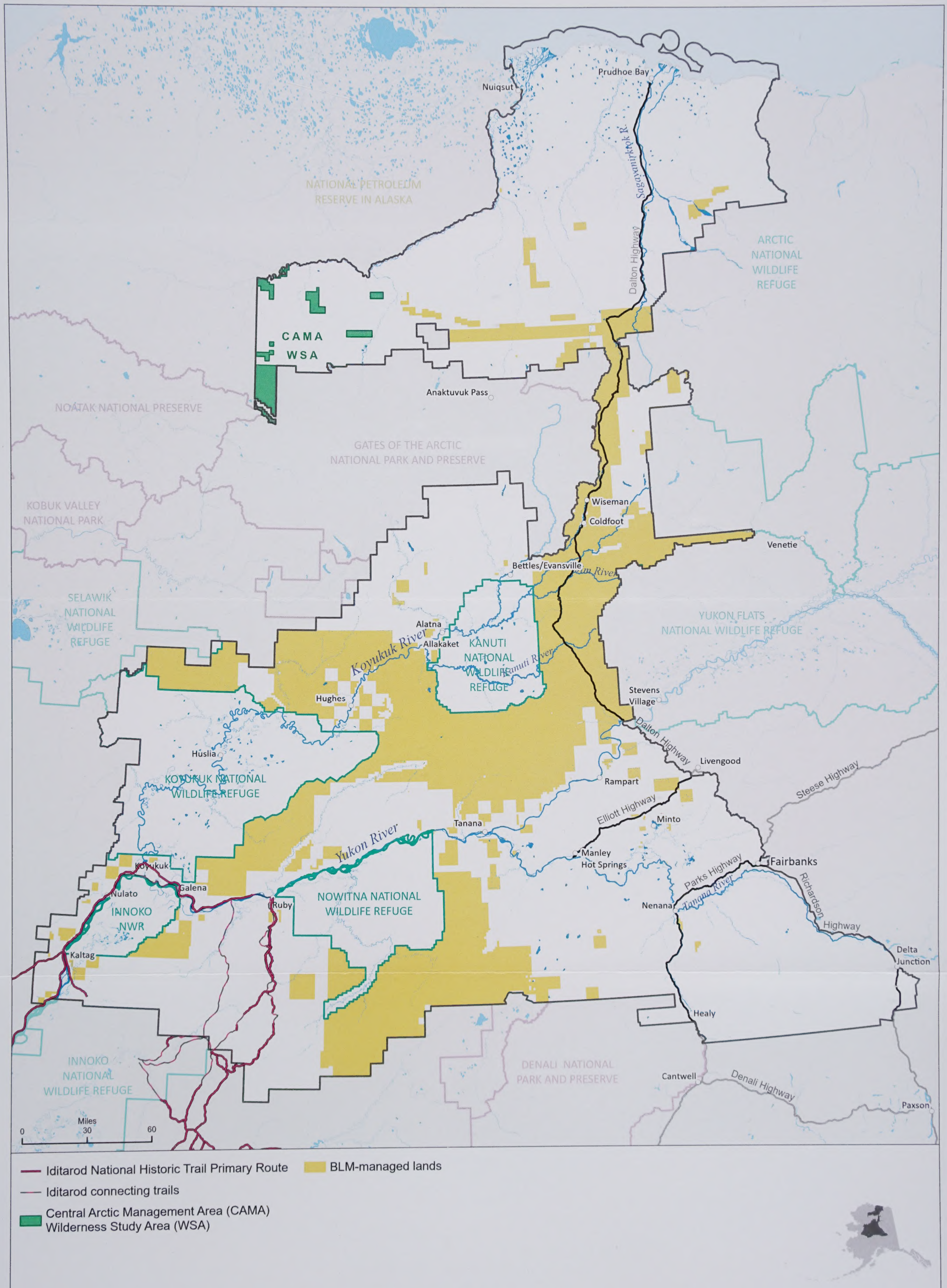
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.23

Print Date: 11/07/2024

Alternative E: Wilderness Study Area and National Historic Trail


Prudhoe Bay
Nuiqsut
NATIONAL PETROLEUM RESERVE IN ALASKA
Sagavanirktok R.
Dalton Highway
ARCTIC NATIONAL WILDLIFE REFUGE
CAMA
WSA
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Nenana
Richardson Highway
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
Iditarod National Historic Trail Primary Route
BLM-managed lands
Iditarod connecting trails
Central Arctic Management Area (CAMA) Wilderness Study Area (WSA)

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.24

Print Date: 11/07/2024

Appendix B

Collaboration and Coordination

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX B. COLLABORATION AND COORDINATION B-1

- B.1 Collaboration B-1
- B.2 Tribal and Alaska Native Corporations' Consultation B-2
- B.3 National Historic Preservation act Section 106 Consultation B-4
- B.4 BLM Alaska Resource Advisory Council Collaboration B-5

TABLES

Page

- B-1 Cooperating Agency Participation B-1
- B-2 Federally Recognized Tribes and Alaska Native Claims Settlement Act Native Corporations Contacted Regarding Cooperating Agency Status, Section 106 of the National Historic Preservation Act Consultation, and Government-to-Government Consultation B-2

ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	area of critical environmental concern
ANCSA	Alaska Native Claims Settlement Act
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
RAC	Resource Advisory Council
ROD	Record of Decision
RMP	Resource Management Plan
SHPO	State Historic Preservation Office

Appendix B. Collaboration and Coordination

B.1 COLLABORATION

The Bureau of Land Management (BLM) is the lead agency for the Central Yukon Resource Management Plan (RMP). At the outset of the planning process, the BLM sent letters of invitation to local, state, federal, and Tribal representatives, inviting them to participate as cooperating agencies for the Central Yukon RMP.

Table B-1
Cooperating Agency Participation

Agencies and Tribes Invited to Be Cooperators	Agencies and Tribes that Signed a Memorandum of Understanding
U.S. Department of the Interior, Fish and Wildlife Service	Yes
U.S. Department of the Interior, National Park Service	No
Alaska Department of Natural Resources, Representing the State of Alaska	Yes
Denali Borough	No
Fairbanks North Star Borough	No
North Slope Borough	No
Northwest Arctic Borough	No
Eielson Air Force Base	No
Joint Base Elmendorf-Richardson	No
U.S. Army Garrison Fort Wainwright	No
The BLM invited all Tribal entities listed in Section B.2 to be cooperators	See Section B.2

Cooperating agency points-of-contact were included on the Central Yukon RMP mailing list and received notice of the 16 public scoping meetings held in 2013 and 2014, where they were able to participate and make official scoping comment submissions. The BLM also invited cooperating agencies to a series of week-long alternative development workshops at the BLM Fairbanks District Office, held October 31 through November 4, November 14 through 18, and December 5 through 9 of 2016.

Following these workshops, the BLM continued to update cooperating agencies on the progress and availability of materials relating to the Central Yukon RMP with phone calls and emails throughout the National Environmental Policy Act (NEPA) process. The BLM continued to meet, coordinate, and share information with individual cooperating agencies. The Central Yukon RMP cooperating agencies were also offered the opportunity to review internal versions of the Draft RMP/Environmental Impact Statement (EIS).

A large quantity of input was received from cooperating agencies on a wide range of topics, including wildlife habitat, ACEC designations and management, recommending or not recommending revocation of PLO 5150 and ANCSA 17(d)(1) withdrawals, energy and minerals, and subsistence. Public comments made by cooperating agencies on the Draft RMP/EIS are captured in Appendix U of the Proposed RMP/Final EIS. The concerns and information provided by cooperating agencies throughout the NEPA process were considered and incorporated as appropriate into the Proposed RMP/Final EIS.

This incorporation resulted in corrections and changes to the EIS analysis and shaped the decisions made by the BLM in development of the Approved RMP, including:

- The Alaska Department of Game and Fish staff shared expertise and concerns regarding wildlife such as sheep and caribou habitat, and the best data to use in development of the RMP. The State's surveys of rural community subsistence use were invaluable in the process of evaluating impacts to those communities.
- Based on input from the State of Alaska, access rights under the Alaska National Interest Lands Conservation Act and how they interact with the RMP process were clarified in the Proposed RMP/Final EIS and ROD/Approved RMP.
- Through public comments on the Draft RMP/EIS, the U.S. Fish and Wildlife Service expressed concern that if the BLM recommended to revoke PLO 5150 and the ANCSA 17(d)(1) withdrawals and those withdrawals were revoked by the Secretary, there would be significant environmental impacts from mining by the State and that conveyed lands would no longer be protected by BLM designations such as ACECs. The BLM listened to this concern and added more analysis of the impacts of mining and the loss of the protections provided by the withdrawals to the Proposed RMP/Final EIS for each alternative with respect to revocation or retention PLOs.
- Through public comments on the Draft RMP/EIS, the Evansville Tribal Council clarified their desires on how to handle the traditional cultural properties and eligibility for the National Register of Historic Places that the council previously identified. In response to this, the BLM clarified the text in the Proposed RMP/Final EIS generally as suggested by the Evansville Tribal Council.

B.2 TRIBAL AND ALASKA NATIVE CORPORATIONS' CONSULTATION

Table B-2
Federally Recognized Tribes and Alaska Native Claims Settlement Act Native Corporations Contacted Regarding Cooperating Agency Status, Section 106 of the National Historic Preservation Act Consultation, and Government-to-Government Consultation

Count	Federally Recognized Tribes	Alaska Native Claims Settlement Act Native Corporations (Associated Tribes)
1	Alatna Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
2	Allakaket Village*	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
3	Hughes Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
4	Huslia Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
5	Village of Anaktuvuk Pass	Nunamiut Corporation, Incorporated (Anaktuvuk Pass)
6	Evansville Village	Evansville, Incorporated (Evansville Village)
7	Louden Village (Galena)	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
8	Village of Kaltag	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)

Count	Federally Recognized Tribes	Alaska Native Claims Settlement Act Native Corporations (Associated Tribes)
9	Village of Koyukuk*	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
10	Nulato Village*	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
11	Nenana Native Association	Toghotthele Corporation (Nenana)
12	Native Village of Nuiqsut	Kuukpik Corporation (Nuiqsut)
13	Native Village of Minto	Seth-De-Va-Ah Corporation (Minto)
14	Native Village of Ruby*	Dineega Corporation (Ruby)
15	Native Village of Stevens	Dinyee Corporation (Stevens Village)
16	Native Village of Tanana*	Tozitna, Limited (Tanana)
17	Native Village of Unalakleet	Unalakleet Native Corporation (Unalakleet)
18	Manley Hot Springs Village	Bean Ridge Corporation (Manley Hot Springs)
19	Rampart Village	Baan O Yeel Kon Corporation (Rampart)
20	Native Village of Venetie Tribal Government*	None

*Cooperator

Regional Native Corporation
NANA Regional Corporation Inc.
Arctic Slope Regional Corporation
Doyon, Limited

The BLM offered formal consultation with a letter of notification and inquiry to the federally recognized Tribes, ANCSA village corporations, and ANCSA regional corporations listed in **Table B-2** at the same time as extending an invitation to participate as cooperating agencies.

The BLM offered the opportunity to participate in formal government-to-government consultation, the opportunity to receive information about the project, and the option for Tribal governments to participate as cooperating agencies. Government-to-government and ANCSA corporation consultation and coordination are not limited to formal public scoping or comment periods; consultation and coordination have continued throughout the planning process. This is to ensure that the BLM takes into consideration the concerns and special knowledge of Tribes and ANCSA corporations during development of the Proposed RMP/Final EIS and the Approved RMP. In addition to the notice Tribes and ANCSA corporations received of the scoping meetings, invitations to the alternative development workshops in 2016, and the meetings with Tribes and ANCSA corporations listed in the paragraph below, the BLM has included the ANCSA corporations and Tribes listed in **Table B-2** in all outreach efforts during the planning process. Consultation is not limited to the timeline of this resource management planning process, and the BLM will continue to offer consultation to any Tribe or ANCSA corporation that may be affected as the plan is implemented.

The BLM has met with all Tribes that have requested consultation, including the Alatna Village, Allakaket Village, Louden Village (Galena), Native Village of Nuiqsut, Native Village of Ruby, Native Village of Tanana, Native Village of Venetie Tribal Government, Nulato Village, Koyukuk Native Village, Native Village of Rampart, Native Village of Kaltag, Native Village of Anvik, Native Village of Fort Yukon, Native Village of Evansville, Alatna Tribal Council, Huslia Tribal Council, and Louden Tribal Council. The BLM has also consulted with the ANCSA regional corporations of Doyon, Limited and Arctic Slope Regional Corporation, as well as the Dinyee Corporation (the Stevens Village ANCSA village corporation).

In spring 2023, the BLM sent letters to solicit consultation with Tribes and ANCSA corporations on the Proposed RMP/Final EIS. Over the course of seven meetings, the BLM consulted with the following Tribes: Allakaket Village, Huslia Village, Evansville Village, Native Village of Ruby, Alatna Village, Native Village of Tanana, Fort Yukon, Village of Koyukuk, Nulato Village, Rampart Village, Village of Kaltag, and Anvik. The BLM also consulted with the following corporations: Doyon, Limited; Arctic Slope Regional Corporation; and Dinyee Corporation. Consultation with Tribes and ANCSA corporations revealed a wide range of interests and concerns. These included sensitive areas such as those related to traditionally and culturally important places, uses, and resources; the subsistence way of life; and management of the Dalton Corridor.

The input received from Tribes and ANCSA corporations during the consultation process was considered and incorporated into the Proposed RMP/Final EIS as appropriate and has helped shape management direction in the Approved RMP regarding consultation, Traditional Cultural Properties, and designation of Tribally nominated areas of critical environmental concern (ACECs). In response to input received, examples of changes the BLM made include:

- In part due to consideration of input that the BLM received during government-to-government consultation regarding the substantial impacts to subsistence of the Tribal member, the BLM is making no recommendation for the revocation of Public Land Order 5150 while also recommending a partial revocation of ANCSA 17(d)(1) withdrawals to allow for Alaska Native Vietnam-era veterans to select allotments under Section 1119 of the Dingell Act.
- The BLM consulted with Doyon Limited in May 2024 on Alaska Native-selected lands within ACECs and access to Alaska Native lands by crossing ACECs. In response, the BLM clarified access through ACECs in **Section 1.4**, Clarifications and Modifications since the Proposed RMP.

B.3 NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION

The National Historic Preservation Act (NHPA) implementing regulations are found in 36 Code of Federal Regulations (CFR) Part 800 and Part 60. While Parts 800.3 through 800.6 provide for the stand-alone implementation of Section 106, Part 800.8(c) provides a process that meets the Section 106 obligation through the NEPA process; this is the “NEPA substitution” method of compliance used for the Central Yukon RMP.

Similar to the NEPA, Section 106 of the NHPA requires that all federal agencies consult with interested groups of the public, as well as state and local governments, other federal agencies, interested Tribes, and Alaska Native corporations in the decision-making process (36 CFR 800). Section 106 consulting parties for the Central Yukon RMP as defined under 36 CFR 800.2 included Alatna Village, Allakaket Village, and the State of Alaska.

In 2018, the BLM invited the Alaska State Historic Preservation Office (SHPO) to review and comment on the Draft RMP/EIS and provided the Draft RMP/EIS to the SHPO’s for review. No comments were received from the SHPO during the public comment period. The BLM will follow Section 106 of NHPA, including consulting with the SHPO, for any activities on federal lands that result from the implementation of the RMP.

In 2019, through consultation with Alatna Village and Allakaket Village, the BLM worked to identify multiple potential traditional cultural properties within the administrative boundaries of the Central Yukon Field Office. As desired by the Tribes, no official nominations to the National Register of Historic Places have been made at this time. No adverse effects on potential traditional cultural properties from decisions made in the ROD/Approved RMP have been identified. Potential for adverse effects on traditional cultural properties will continue to be accounted for through ongoing Section 106 consultation, including consultation undertaken as part of implementation level projects tiered to the Approved RMP.

The recommendation for revocation, in part, of land withdrawals by the Secretary of the Interior to allow for Alaska Native Vietnam-era veterans to select allotments under Section 1119 of the Dingell Act was developed out of the draft alternatives for inclusion in Alternative E of the Proposed RMP/Final EIS. This partial revocation was identified as an action with potential to adversely affect historic properties as defined under the NHPA and is recommended by the BLM in the Central Yukon Approved RMP. The BLM will conduct further Section 106 consultation prior to any Secretarial action.

In November 2024, the BLM and the Alaska SHPO executed and filed an amendment to an existing Programmatic Agreement with the Advisory Council on Historic Preservation.[1] Consultation carried out for this amendment addressed the potential impacts of the revocation in part of the ANCSA 17(d)(1) withdrawals recommended in the Proposed RMP/Final EIS.

The input received from the consulting parties during the NEPA process (including public comments on the Draft RMP/EIS captured in Appendix U of the Proposed RMP/Final EIS) was considered for incorporation into the Proposed RMP/Final EIS and Approved RMP and included as appropriate. In response to input received, examples of changes the BLM made include:

- Documenting and including identification of potential traditional cultural properties to the extent desired by the affected communities, and
- Accounting for the potential effects of partial revocations on historic properties and traditional cultural properties.

B.4 BLM ALASKA RESOURCE ADVISORY COUNCIL COLLABORATION

The BLM Alaska Resource Advisory Council (RAC) is a committee established by the Secretary of the Interior to provide advice or recommendations to BLM management (BLM 2005). The Alaska RAC consists of up to 15 members of the public representing different areas of expertise. It includes a cross section of Alaskans from around the state representing energy, tourism, and commercial recreation interests; environmental, archaeological, or historic interests; and elected officials, Alaska Native organizations, and the public at large. The Secretary appoints council members based on their ability to provide informed, objective advice on a broad array of public lands issues and their commitment to collaboration in seeking solutions to those issues. All current members of the Alaska RAC are regularly notified of opportunities for input on land use planning.

---

[1] Final Programmatic Agreement Between United States Department of the Interior, Bureau of Land Management, and Alaska State Historic Preservation Officer Regarding the Alaska Native Vietnam-Era Veterans Land Allotment Program, Alaska (BLM and Alaska SHPO 2022)

The BLM has updated the Alaska RAC on the progress and availability of materials relating to the Central Yukon RMP throughout the NEPA process. Members of the Alaska RAC received notice of the scoping meetings, invitations to the alternative development workshops in 2016, and the BLM also presented information about the RMP at the council's 2013, 2015, and 2017 meetings. The BLM has continued to seek input from the Alaska RAC throughout the Central Yukon planning process. Input was received from the Alaska RAC on a wide range of topics including subsistence; ACECs; the planning process; land withdrawals and conveyance; as well as mineral resource development. This input was considered for incorporation into the Proposed RMP/ Final EIS and Approved RMP and included as appropriate.

Appendix C

Relationship to BLM Policies, Plans, and Programs

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX C. RELATIONSHIP TO BLM POLICIES, PLANS, AND PROGRAMS C-1

- C.1 Policies C-1
- C.2 Handbooks and Manuals C-1
- C.3 Plans C-1
  - C.3.1 BLM Plans C-1
  - C.3.2 Other Federal Agency Land Use Plans C-2
  - C.3.3 State of Alaska Plans C-2
  - C.3.4 Local Government Plans C-3
  - C.3.5 Tribal or Alaska Native Claims Settlement Act Corporation Plans C-4
- C.4 References C-4

ACRONYMS AND ABBREVIATIONS

	Full Phrase
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
RMP	resource management plan

Appendix C. Relationship to BLM Policies, Plans, and Programs

The Bureau of Land Management (BLM) planning regulations provide that resource management plans (RMPs) be consistent with approved or adopted resource-related plans and other policies and programs of other federal agencies, state and local governments, and Indian Tribes, so long as the guidance and RMPs are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands.

In Alaska, public land management is further directed by the Alaska National Interest Lands Conservation Act, the Alaska Native Claims Settlement Act, and the Alaska Statehood Act, particularly in regard to land tenure, access, and subsistence. Under the Alaska Statehood Act, the State of Alaska was allowed to select 104 million acres of federal land. Approximately 26 percent of BLM-managed land in the planning area is State-selected. The Alaska Native Claims Settlement Act requires the transfer of 44 million acres of public land to Alaska Native corporations. Approximately 7 percent of BLM-managed land in the planning area is Native-selected. Because conveyance of State- and Native-selected lands is ongoing, the implementation of planning decisions on selected lands may be delayed until final ownership is determined.

Below is a list of other policies, plans, and guides that the BLM considered during the planning process.

C.1 POLICIES

BLM policies are outlined in a variety of sources, including manuals, handbooks, executive orders, and instruction memoranda (available at https://www.blm.gov/policy/instruction-memorandum).

C.2 HANDBOOKS AND MANUALS

BLM manuals include a specific policy for each subject. The BLM Alaska Statewide Land Health Standards (BLM 2011) outlines the BLM Alaska's policy on land health.

- BLM Manual 1601, Land Use Planning Manual (BLM 2000)
- BLM Handbook H-1601-1, Land Use Planning Handbook (BLM 2005)
- BLM Handbook H-1790-1, National Environmental Policy Act Handbook (BLM 2008)
- A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners (BLM 2012)
- Reinstating the BLM Manual Section (MS-1794) and Handbook (H-1794-1) on Mitigation (BLM 2021)

C.3 PLANS

C.3.1 BLM Plans

- BLM Mitigation Policy
- Bering Sea-Western Interior RMP
- Eastern Interior RMP
- Kobuk-Seward Peninsula RMP
- Fort Greely RMP

- National Petroleum Reserve Alaska Integrated Activity Plan—2022
- Dalton Highway Management Area Integrated Invasive Plant Strategic Plan—2013
- Various habitat management plans for Areas of Critical Environmental Concern
- Iditarod National Historic Trail Comprehensive Management Plan, BLM, 1986

C.3.2 Other Federal Agency Land Use Plans

- Koyukuk/Northern Unit Innoko/Nowitna National Wildlife Refuges Comprehensive Conservation Plan—2009
- Kanuti National Wildlife Refuge Revised Comprehensive Conservation Plan – 2008
- Arctic National Wildlife Refuge Comprehensive Conservation Plan—2015
- Yukon Flats National Wildlife Refuge Comprehensive Conservation Plan—1987
- Gates of the Arctic National Park General Management Plan—1986 and the 2014 amendment
- Denali National Park and Preserve General Management Plan and amendments—1896, 1997, and 2006
- U.S. Army Garrison Alaska Integrated Natural Resource Management Plan—2020
- U.S. Army Transformation Environmental Impact Statement—2004

C.3.3 State of Alaska Plans

- Master Memorandum of Understanding between the Alaska Department of Fish and Game and the Bureau of Land Management—1983
- Dalton Highway Master Plan—1998
- Eastern Tanana Basin Area Plan—2015
- Yukon-Tanana Area Plan—2014
- Wildlife Action Plan—2015
- Aquatic Nuisance Species Management Plan—2002
- North Slope Area Plan—2021
- Northwest Alaska Transportation Plan—2022

The BLM reviewed the plans listed above to determine consistency with goals and policies contained in the plans. Overall, the BLM found that the Approved Plan is consistent with state plans because it will not impede the goals and policies of those plans.

The BLM received an Alaska Governor's Consistency Review letter from the State of Alaska on June 25, 2024. This letter identified seven issues, three of which were about inconsistencies between State plans and the proposed RMP/Final EIS, listed below:

4. The North Slope Area Plan did not find any lands suitable for management as ACECs.
5. [There are] Inconsistencies with State Land Use Plans, Policies, and Terminology.
6. The Plan and planning process failed to meet the commitments in the Master Memorandum of Agreement between the Alaska Department of Fish and Game and the BLM which outlines the general guidelines within which the two agencies agree to operate and with Alaska Department of Fish and Game's 2015 Alaska Wildlife Action Plan.

For issue 4, the Proposed RMP/Final EIS and the State's North Slope Area Plan applied different standards in determining which lands should be designated as ACECs based on different authority and criteria. To the extent there is any inconsistency, it is with those different authorities and criteria which are not set by the Central Yukon RMP. The fact the BLM came to different conclusions is likely based purely on differences in the federal standards compared to the State standards. The designation of ACECs is based on federal law and policy, and the State has not shown an inconsistency between its plan and the Proposed RMP/Final EIS when federal law and policy is applied.

For issue 5, the State claimed that BLM's curb weight decisions and ACECs and State Water Quality Protection Programs are inconsistent with state plans. The BLM reviewed the Governor's letter and the corresponding plans. The BLM found that these are not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans.

For issue 6, the BLM reviewed the Master Memorandum of Understanding and the 2015 Alaska Wildlife Action Plan. The BLM found that these are not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans.

The BLM planning regulations at 43 Code of Federal Regulations (CFR) § 1610.3-2 and policy direction in the BLM Land Use Planning Handbook 1601 make clear that the BLM's plan should be consistent with State, local, and Tribal land use plans, insofar as they are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands. To the extent there is any inconsistency, it is with those different authority and criteria which are not set by the Central Yukon RMP. The fact the BLM came to different conclusions is likely based purely on differences in the federal standards compared to the State standards.

Where a State plan disagrees with a resource management plan, those of a higher authority (the federal government) will normally be followed. Therefore, inconsistency between the Approved RMP and State plans is due to the state plan not aligning with federal standards compared to the State standards.

C.3.4 Local Government Plans

- North Slope Borough Comprehensive Plan—2005 and 2019
- North Star Borough Regional Comprehensive Plan—2005
- Denali Borough Comprehensive Plan and amendments—adopted 2009, amended 2015
- Northwest Arctic Borough Comprehensive Plan—1993, updated 2021

The BLM reviewed the plans listed above to determine consistency with goals and policies contained in the plans. Overall, the BLM found that the RMP is mostly consistent with local government plans because it will not impede the goals and policies of those plans, with some exceptions. In cases where the RMP would apply a restriction on a portion of land (e.g., designating land as either right of way exclusion or avoidance) and the restriction would potentially come into conflict with a local government plan, the restriction is limited in either scope, acreage, or location to an extent that it does not impede the goals and policies of local government plans.

The BLM planning regulations at 43 CFR § 1610.3-2 and policy direction in the BLM Land Use Planning Handbook 1601 make clear that the BLM's plan should be consistent with State, local, and Tribal land use plans, insofar as they are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands. Therefore, inconsistency between the RMP and local government plans is due to the local government plan not aligning with federal laws and regulations applicable to public land.

C.3.5 Tribal or Alaska Native Claims Settlement Act Corporation Plans

- A Comprehensive Land Use Plan for the Traditional Lands of Stevens Village—1991
- Stevens Village Community Plan—2024 through 2029
- Rampart Community Plan—2019
- Tanana Community Plan—2023 through 2028
- Minto Community Plan—2023 through 2028
- Koyukuk Community Plan—2018 through 2023
- Ruby Community Plan—2023 through 2028
- Galena Community Plan—2023 through 2028
- Venetie Community Development Plan—2013 through 2018
- Nenana Community Development Plan—2019 through 2023
- Arctic Slope Regional Corporation 2018–2023 Strategic Plan

The BLM reviewed the Tribal plans listed above to determine consistency with goals and policies contained in the plans and found that the RMP is consistent with these plans because it will not impede the plans' goals and policies.

The BLM also reviewed the Arctic Slope Regional Corporation (ASRC) plan to determine consistency of the Central Yukon RMP with goals and policies contained in the ASRC plan. The ASRC commented that the Draft RMP/EIS displayed incorrect GIS data on its maps. Land that had been already conveyed from BLM to the ASRC was still displayed as BLM-managed land in the Draft RMP/EIS. The Proposed Plan/Final EIS updated the GIS data and maps for all alternatives. The BLM found that the Proposed Plan/Final EIS was consistent with the ASRC 2018-2023 Strategic Plan and will not impede the goals and policies of the plan.

C.4 REFERENCES

BLM (U.S. Department of the Interior, Bureau of Land Management). 2000. 1601—Land Use Planning. BLM Manual. Rel. 1-1666. Washington, DC. November 22, 2000.

_____. 2005. H-1601-1—Land Use Planning Handbook. Rel. 1-1693. Washington, DC. March 11, 2005.

_____. 2008. H-1790-1—National Environmental Policy Act. Rel. 1-1710. BLM Washington Office. January 30, 2008.

_____. 2011. Alaska Statewide Land Health Standards. Alaska State Office. Anchorage. September 2, 2011.

_____. 2012. A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners. BLM Washington Office.

_____. 2021. IM 2021-046, Reinstating the Bureau of Land Management (BLM) Manual Section (MS-1794) and Handbook (H-1794-1) on Mitigation. Washington, DC. Internet website: https://www.blm.gov/policy/im-2021-046.

Appendix D

ANILCA Access

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX D. ANILCA ACCESS D-1

Reference D-2

MAP

Page

D-1 Alternative E: ANCSA 17(d)(1)s and BLM-managed Resources D-3

ACRONYMS AND ABBREVIATIONS	Full Phrase
ACEC	area of critical environmental concern
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
RMP	resource management plan
ROD	record of decision
ROW	right-of-way
TMP	travel management plan

Appendix D. ANILCA Access

This section provides guidance on implementing Sections 811, 1110(a), and 1323(b) of the Alaska National Interest Lands Conservation Act (ANILCA; 16 U.S. Code 3101 et seq.), as follows:

- Under Section 811 of ANILCA, the Secretary of the Interior shall permit on public lands the appropriate use, for subsistence purposes, of snowmachines, motorboats, and other means of surface transportation traditionally used for such purposes by residents (see ANILCA Section 102(3) for the definition of public lands).
- Under Section 1110(a) of ANILCA, the Secretary shall permit on conservation system units, national recreation areas, national conservation areas, and public lands designated as wilderness study the use of snowmachines, motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities and for travel to and from villages and homesites.
- Under Section 1323(b) of ANILCA, access is granted to non-federally owned land surrounded by public land managed by the Bureau of Land Management (BLM) to secure to the owner "reasonable use and enjoyment," subject to terms and conditions and the rules and regulations applicable to access across the public lands.

Pursuant to ANILCA Sections 811, 1110(a), and 1323(b) such uses are subject to reasonable regulation. The National Park Service and U.S. Fish and Wildlife Service have developed regulations to implement Section 811; while the BLM has not developed similar regulations. Rather, this Resource Management Plan (RMP) permits reasonable access to public lands in the planning area for subsistence use similar to the regulations promulgated by the National Park Service (see 36 Code of Federal Regulations [CFR] 13.460(b)) and the U.S. Fish and Wildlife Service (50 CFR 36.12(b)) in 1.

The BLM may implement restrictions on and closures to the use of snowmachines, motorboats, and other means of surface transportation traditionally used for subsistence purposes by rural residents (ANILCA Section 811(b)); however, it would do this only if the BLM Authorized Officer determines that such use is causing or is likely to cause an adverse impact on public health and safety, resource protection, historic or scientific values protection, subsistence uses, endangered or threatened species conservation, or other purposes, values, and uses for which the lands are being managed under the Federal Land Policy and Management Act or designated by ANILCA.

The BLM will follow the regulations implementing Section 1110(a), as found in 43 CFR 36. The BLM may implement restrictions on and closures to snowmachines, motorboats, aircraft, and nonmotorized surface transportation methods for traditional activities, such as domestic dogs, horses, and other pack or saddle animals. Restrictions or closures would be implemented only if the BLM Authorized Officer makes a finding, pursuant to 43 CFR 36.11(h), that such uses would be detrimental to the resource values of the area.

As required by ANILCA Section 1110(b), the BLM will provide access to inholdings in conservation system units and wilderness study areas. Unless specific lands are designated as right-of-way (ROW) exclusion areas, Area of Critical Environmental Concern (ACEC) designations would not prevent or preclude authorized access to adjacent lands not managed by the BLM. ACEC designations would not prevent any ROWs guaranteed under Section 1323(b) of ANILCA. The BLM will continue to evaluate proposals for access across ACEC lands to private lands for their environmental impacts.

ROW avoidance areas within ACECs are areas that would be available for authorized activities that may entail special stipulations or consideration of other site-specific alternatives to protect identified relevant and important values for the subject ACEC(s) involved. The BLM would work with any project proponent to design a project plan in ROW avoidance areas that meet the proponent's needs and protects relevant and important ACEC values.

Because the transportation and travel management planning is deferred, interim decisions are identified to address more immediate issues until the travel management plan (TMP) is completed.

After the RMP/environmental impact statement ROD and travel management decision record are signed, the BLM will undertake the following process for both interim and final decisions:

- Publish the notice of decisions in the *Federal Register* and other formats and locations reasonably calculated to inform residents in the affected vicinity
- Allow a minimum of 60 days for the public comment period on the decisions
- Hold public hearings in the affected communities and other locations deemed appropriate by the BLM
- Consultation with relevant organizations within the federal subsistence management system and government-to-government consultation with affected Tribes.
- Respond to comments and publish the final decisions in the *Federal Register*
- Make the final decisions known by the following methods (at a minimum):
  - Make decisions and maps with relevant information available for public inspection at the BLM office and at other places convenient to the public and at locations and in formats reasonably calculated to inform residents in the affected vicinity
  - Post signs at appropriate sites
  - List decisions and show relevant maps on BLM brochures and websites

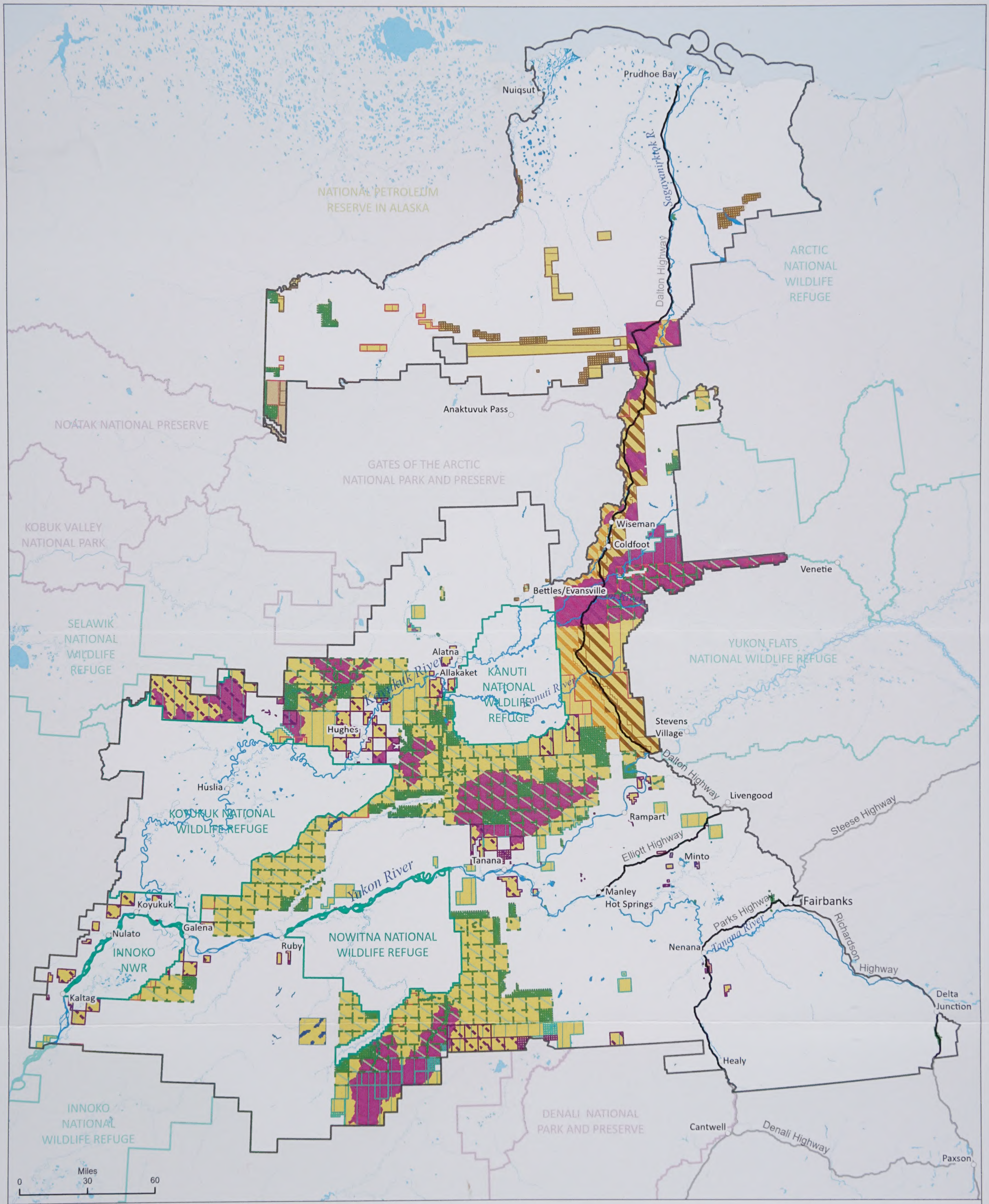
Because the decision in the record of decision is to develop a step-down transportation and TMP, the BLM will follow the decision process described above to address any TMP decisions that are covered by Sections 811, 1110(a), and 1323(b). This rule process will be completed after the decision record on the transportation and TMP.

REFERENCE

H.R. —Alaska National Interest Lands Conservation Act (ANILCA). XXIII. Appendix. Public Law 96-487. December 2, 1980, As amended through public law 115-97, December 22, 2017. Internet website https://www.govinfo.gov/content/pkg/COMPS-209/pdf/COMPS-209.pdf.

Alternative E: ANCSA 17(d)(1)s and BLM-managed Resources

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Fairbanks
Parks Highway
Tanana River
Richardson Highway
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟪 Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

▨ Special Recreation Management Area (SRMA) including recreation management zones (RMZs)

▨ Backcountry Conservation Area (BCA)

▭ Extensive Recreation Management Area (ERMA)

ANCSA 17(d)(1) withdrawals: recommend that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans

☐ PLO 5169

☐ PLO 5173

☐ PLO 5179

☐ PLO 5180

▨ PLO 5184

▨ PLO 5186

▨ PLO 5242

🟨 BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map D-1

Print Date: 11/07/2024

Appendix E

Standard Operating Procedures and Fluid Mineral Leasing Stipulations

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX E. STANDARD OPERATING PROCEDURES AND FLUID MINERAL LEASING STIPULATIONS E-1

E.1 Introduction E-1
E.2 Standard Operating Procedures E-1
    E.2.1 Air (AIR) E-2
    E.2.2 Soils (SOI) E-3
    E.2.3 Watersheds and Fisheries (WAT/FISH) E-5
    E.2.4 Vegetation and Nonnative Invasive Species (VEG/NNIS) E-7
    E.2.5 Wildlife (WILD) E-8
    E.2.6 Wildland Fire Management (FM) E-10
    E.2.7 Visual Resource Management (VRM) E-11
    E.2.8 Forestry (FOR) E-11
    E.2.9 Mineral Materials and Locatable Minerals (MIN-LMM) E-11
    E.2.10 Lands and Realty (LR) E-12
    E.2.11 Travel and Transportation Management (TTM) E-12
    E.2.12 National Trails (NAT) E-12
    E.2.13 Hazardous Materials and Health and Human Safety (HAZMAT) E-12
    E.2.14 Subsistence (SUB) E-14
    E.2.15 Mining and Fluid Mineral Leasing (MIN-LEA) E-15
E.3 Fluid Mineral Leasing E-16
    E.3.1 Fluid Mineral Leasing Stipulations E-16
    E.3.2 Standard Lease Terms E-21
E.4 References E-21

ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	areas of critical environmental concern
AO	Authorized Officer
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EIS	environmental impact statement
NEPA	National Environmental Policy Act
NNIS	nonnative invasive species
RMP	resource management plan
ROD	record of decision
SOP	standard operating procedures
USFWS	U.S. Fish and Wildlife Service

Appendix E. Standard Operating Procedures and Fluid Mineral Leasing Stipulations

E.1 INTRODUCTION

The Bureau of Land Management (BLM) developed standard operating procedures (SOPs) and fluid mineral leasing stipulations to protect resources. These guidelines were based on the standards and guidelines in the Alaska Statewide Land Health Standards (Instruction Memorandum AK 2004-023) and by the goals outlined in this resource management plan (RMP)/environmental impact statement (EIS).

The SOPs are requirements, procedures, management practices, and design features that the BLM will use to protect resources. Leasing stipulations are requirements to reduce impacts on natural resources from fluid mineral exploration and development. The SOPs and leasing stipulations generally do not restate existing requirements in regulations or laws, including state laws. Regulations or laws may require conditions that are more stringent than those presented in this section. Chapter 6 of the Analysis of the Management Situation, Central Yukon RMP[1] includes a partial list of mandates and authorities pertaining to federal lands.

E.2 STANDARD OPERATING PROCEDURES

The SOPs apply to all actions on public land, whether the BLM implements them or if they authorize them and they are implemented by another individual, organization, or agency. The SOPs were based on the best information available during development of the Central Yukon RMP/EIS.

The BLM will apply the SOPs to all its actions and to activities that it authorizes such as: Federal Land Policy and Management Act leases and permits; special recreation permits; oil and gas activities; renewable energy activities; mining plans of operation; and authorizations for rights-of-way. While the SOPs generally will be applied to new activities moving forward from the signature date of the Record of Decision (ROD) for this RMP, the BLM retains the leeway by regulation to change the terms and conditions of authorizations as a result of changes in legislation, regulation, or as otherwise necessary to protect public health or safety or the environment.

For fluid mineral leasing activities, SOPs would apply, in addition to the standard lease terms and leasing stipulations. Only those SOPs concerning resources that are potentially affected by the action would be applied to authorizations. For example, SOPs protecting caribou habitat would not apply to projects that are not in caribou habitat. They may be modified through site-specific analysis of subsequent authorizations, but they still must meet the goals and objectives of the RMP/EIS.

SOPs will continue to evolve as better resource information is gained and changes in technology become available. Modifications to SOPs may be appropriate if other measures are taken to protect resources that would result in the same or reduced impact.

SOPs are considered during the site-specific analysis during activity-level planning and, if adopted, are applied as conditions of approval to land use authorizations and permits.

---

[1] Bureau of Land Management. 2016. Analysis of the Management Situation, Central Yukon Resource Management Plan. Central Yukon Field Office. Fairbanks, Alaska. April 2016. Internet website: https://eplanning.blm.gov/eplanning-ui/project/35315/570.

If a particular SOP is demonstrated to be not feasible or not practicable for a specific activity or authorization, then exclusion or modification of that SOP, or deployment of an alternative SOP, may be considered at the discretion of the BLM Authorized Officer (AO).

SOPs are not selected as a condition of the authorized activities if the applicant has included them as part of the proposal or they have identified an alternative. An example of the latter is the adoption of an acceptable best management practice to meet stated resource management objectives. Applicants are encouraged to consider alternative methods, best management practices, and design features for the BLM's consideration during the permitting process. If an applicant does not include alternatives for agency consideration, the SOPs identified will be incorporated into an approval for a proposed activity.

The BLM AO or representative is responsible for ensuring that the intent of the SOPs presented in this RMP/EIS are followed and that authorization holders comply with the conditions of the authorization. Noncompliance will be documented, and a notice may be sent to the authorization holder, along with corrective actions and a timeframe in which the actions are to be completed.

The following is a complete list of the SOPs that the BLM would apply during implementation of the RMP/EIS.

E.2.1 Air (AIR)

SOP AIR-1 Consider smoke effects on human health, communities, recreation, and tourism in all wildland and prescribed fire management activities.

SOP AIR-2 To prevent degradation of the lands and protect health, the following elements will be adhered to:

a) Before National Environmental Policy Act (NEPA) analysis begins for an application to develop a central processing facility, airstrip, road, gas compressor station, or other potential *substantial* air pollutant emission source, the applicant will submit for the BLM approval a complete list of reasonably foreseeable air pollutant emissions, including criteria air pollutants and hazardous air pollutants designated under authority of the Clean Air Act, as amended.

b) The BLM may require air quality modeling for purposes of analyzing project direct, indirect, or cumulative impacts on air quality, air quality related values, and hazardous air pollutants, if necessary, for the BLM NEPA analysis and no recent modeling analysis is available as a proxy. The BLM may require air quality modeling depending on the following:
    i. The magnitude of potential air emissions from the project
    ii. Proximity to a federally mandated Class I area
    iii. Proximity to a population center
    iv. Location in or proximity to a nonattainment or maintenance area
    v. Meteorological or geographic conditions
    vi. Existing air quality conditions
    vii. Magnitude of existing development in the area
    viii. Issues identified during the NEPA process

c) If air quality modeling indicates that project-related emissions cause or contribute to unnecessary or undue degradation of the public lands, or exceedances of the National Ambient Air Quality

Standards/Alaska Ambient Air Quality Standards, air quality related values, and hazardous air pollutants levels, or if it fails to protect health (either directly or through use of subsistence resources), then the BLM may require the applicant to change their proposal or propose mitigation to reduce impacts. Project changes and mitigation measures will be analyzed through appropriate NEPA analysis to determine effectiveness.

d) Depending on the significance of the predicted impacts, a lessee proposing a central processing facility or other facility with potentially significant impacts on air quality may be required to monitor air pollutant emissions and/or air quality impacts for at least 1 year of operation. Depending upon the initial monitoring results, the BLM AO may require additional monitoring.

If monitoring indicates impacts would fail to protect health (either directly or through the use of subsistence resources), the BLM AO may require changes in the lessee's activities at any time to reduce these emissions, such as using cleaner burning fuels or installing additional emission control systems.

E.2.2 Soils (SOI)

SOP SOI-1 At the beginning of any surface-disturbing activities, organic material will be segregated, stockpiled, and saved for later reclamation.

SOP SOI-2 Except when unavailable, stockpiled soil and overburden will be spread over mine tailings and stabilized to minimize erosion. The shape of contoured tailings and overburden should approximate the shape of the surrounding terrain.

SOP SOI-3 At sites where stockpiled soil quantities are insufficient to distribute over the entire disturbed area, specific areas best suited for reclamation should be selected to receive organic material. Use organic material from adjacent areas, if approved. At sites where organic material is not available, stockpiles of fine inorganic material may be used in place of the organics. The BLM will be available to advise operators on which areas would be best suited to receive organic material.

SOP SOI-4 Roadways will be ditched on the uphill side. Culverts or low-water crossings will be installed at suitable intervals. Spacing of drainage devices and water bars will be appropriate for the road gradient and soil erodibility of the site. Water bars will be placed across reclaimed roads.

SOP SOI-5 Prudent use of erosion control measures, including diversion terraces, riprap, matting, temporary sediment traps, and water bars, will be employed to control soil erosion, as necessary. The type and location of a sediment control structure, including construction methods, will vary by site-specific characteristics. Erosion control materials containing plastic will be avoided. Erosion control materials, when no longer required, will be promptly removed.

SOP SOI-6 Snow and ice bridges will be removed, breached, or slotted before spring ice breakup. Ramps and bridges will be substantially free of soil and debris.

SOP SOI-7 Overland moves and heavy equipment use are as follows:

- Locate new off-highway vehicle trails on stable locations (e.g., ridge tops, benches, and gentle-to-moderate side slopes). Minimize trail construction on steep slopes where runoff could channel to a waterbody.

- Design, construct, and maintain trail width, grades, curves, and switchbacks suitable to the terrain and designated use. Use and maintain surfacing materials suitable to the site and use, to withstand traffic and to minimize runoff and erosion.
- Designate class of vehicle suitable for the trail location, width, trail surfaces, and waterbody crossings, to prevent erosion and potential sediment delivery.
- Use existing road crossings of streams and floodplains on low-volume roads and partially decommissioned roads that tie with the trail system, where safety permits.
- Minimize low-water stream crossings for constructed or existing trails. Cross streams on stable substrate (e.g., bedrock, cobble) in areas of low streambanks.

SOP SOI-8 Areas disturbed during project operation or construction will be restored to be as near to pre-project conditions as practical. Wetland topsoil will be selectively handled. Mulching, erosion control, and fertilization may be required to achieve acceptable stabilization of surface materials. Interseeding, secondary seeding, or staggered seeding may be required to accomplish revegetation objectives. Follow-up seeding or corrective erosion control measures may be required on areas of surface disturbance where reclamation fails. Corrective erosion control measures could include broadcasting woody debris, planting viable portions of live shrubs (sprigging), and transplanting live vegetation from adjacent areas.

SOP SOI-9 Disturbed areas will be reclaimed as soon as possible after the disturbance, with efforts continuing until the site is fully stabilized.

SOP SOI-10 Reduce disturbance of soils by minimizing footprint of surface-disturbing activities; consolidate access to minimize the number of routes; and require prompt implementation of methods to mitigate soil erosion.

SOP SOI-11 To the greatest extent practicable, avoid disturbance of the vegetation mat and permafrost soil areas.

SOP SOI-12 For long-term storage of soil stockpiles, provide protective cover, such as organic mulch, herbaceous vegetation, jute matting, or other erosion-preventative fabric.

SOP SOI-13 Surface-disturbing proposals involving construction on slopes greater than 3:1 will include an approved erosion control strategy and a topsoil segregation/restoration plan. Sites will be properly surveyed and designed by an engineer registered in the State of Alaska; the BLM will approve the sites prior to construction and maintenance.

SOP SOI-14 Permafrost Protection Measures are as follows:

- For all surface-disturbing BLM-authorized activities and activities that require a reclamation plan in areas with permafrost, the BLM would require the project proponent's reclamation plan to include BMPs to avoid or minimize impacts on permafrost. These BMPs could include, but are not limited to, avoiding critical areas; applying permafrost impact prevention measures (e.g., meet conditions of appropriate snow cover and frozen ground, leave vegetation intact, implement reclamation timeline, adjust seasons for operation and overland equipment moves, use minimum impact equipment); and complying with State of Alaska Arctic Civil Engineering requirements, if applicable.
- To the extent possible, surface disturbance would be avoided in areas with moss and peat to provide insulation to permafrost and to prevent accelerated thawing.
- To the extent possible, the BLM would avoid authorizing temporary routes on areas with permafrost.

- To the extent possible, the BLM-authorized temporary routes constructed on permafrost should be built only in winter when snow cover and frost depth are adequate to leave the vegetative layer intact.
- To the extent possible, the BLM would conduct or require re-insulation of disturbed permafrost areas to prevent additional permafrost thaw, and associated possible subsidence, by restoring the natural ground surface thermal regime, particularly on steep erosion-prone soils.
- BLM-authorized roads/airstrips may be required to incorporate necessary engineering considerations on permafrost to provide adequate base material for insulation.

SOP SOI-15 Off-road overland travel in winter (November through March) may be considered open for off-road travel when soil temperatures reach 23 degrees F (-5 degrees C) or colder at 12 inches deep (30 cm) and snow depths average a minimum of 6 inches (15 cm).

E.2.3 Watersheds and Fisheries (WAT/FISH)

SOP WAT/FISH-1 Road crossings or low-water crossings (fords) will not be authorized in fish spawning habitat during spawning or the immobile life stages of fish (eggs and alevins), unless the applicant can demonstrate to the BLM AO that on a site-specific basis, impacts would be minimal.

SOP WAT/FISH-2 New, replacement, and reconstructed stream crossing structures, such as bridges and culverts, will be designed to accomplish the following:

- Accommodate a 100-year flood event, including bedload and debris;
- Maintain or improve fish and aquatic organism passage;
- Maintain channel integrity;
- Accommodate mean bankfull channel widths; and
- Incorporate adjacent reclamation (such as willow cuttings, wattles, and brush layering) on the disturbed areas up and downstream of the abutments.

SOP WAT/FISH-3 Drilling is prohibited in the 100-year floodplain of fish-bearing rivers and streams, and fish-bearing lakes, except where the applicant can demonstrate to the BLM AO on a site-specific basis that impacts would be minimal, or the BLM AO otherwise determines the drilling is necessary (e.g., for bridge design).

SOP WAT/FISH-4 Pesticides and other toxicants will be applied in a manner that does not measurably inhibit the attainment of desired conditions or adversely impact priority aquatic species.

SOP WAT/FISH-5 All water intakes will be screened and designed to prevent fish intake and mortality, in accordance with Alaska Department of Fish and Game requirements.

SOP WAT/FISH-6 For surface-disturbing activities affecting, or with the potential to affect, stream channel integrity, reduce riparian functioning condition, or reduce the Watershed Condition Rating, baseline geomorphic and hydrologic data will be required before the surface is disturbed. The BLM will be available to advise operators on the exact type of information and detail to meet this requirement, as needed.

SOP WAT/FISH-7 In mining operations and fluid mineral leasing operations, all process water and groundwater seeping into an operating area must be treated appropriately. This will be done before such water re-enters the natural water system.

SOP WAT/FISH-8 Settling ponds will be cleaned out and maintained at appropriate intervals to comply with state and federal water quality standards. Fine sediment captured in the settling ponds will be protected from washout and left in a stable condition at the end of each field season.

SOP WAT/FISH-9 Altered stream channels will be restored to a condition that will allow for proper functioning of the riparian zone and stream channels. Active streams will be returned to the natural water course. Alternatively, a new channel will be created at the stream's lowest energy state (valley bottom). Stream channels will be restored to approximate the pre-disturbance channel utilizing natural channel design methods and practices.

SOP WAT/FISH-10 All authorized operations will be conducted so as not to block any stream or drainage system, unless temporarily authorized by the BLM AO.

SOP WAT/FISH-11 Structural and vegetation treatments in riparian and wetland areas will be compatible with the capability of the site, including the system's hydrologic regime. The treatments will contribute to maintenance or restoration of proper functioning condition. Revegetation treatments should mimic a site's pre-disturbance vegetation types.

SOP WAT/FISH-12 When a stream must be crossed, the crossing will be as close as possible to a 90- degree angle to the riparian area and stream, and at as low a bank angle as possible. Stream crossings will be made at stable sections in the stream channel, based on Rosgen channel-type evaluations.

SOP WAT/FISH-13 Vehicular travel up and down streambeds, except by watercraft, is prohibited. The exception is if the stream is frozen to a sufficient depth to sustain the activity and the streambanks are a sufficient distance apart to allow for passage without adverse impacts. Rivers and streams will be crossed at shallow riffles, from point bar to point bar, whenever possible.

SOP WAT/FISH-14 Stream and marsh crossings shall be designed and constructed to ensure free passage of fish, reduce erosion, maintain natural drainage, and minimize adverse effects on natural streamflow.

- To allow for sheet flow and floodplain dynamics and to ensure passage of fish and other organisms, bridges are preferred over culverts. However, culverts may be authorized on smaller streams, if they are large enough to avoid restricting fish passage or adversely affecting natural streamflow and floodplain function.
- The BLM will require fish sampling at any stream crossing where flow is channelized. The holder may be required to gather these data, or this requirement may be waived if an acceptable data set already exists, and it is approved by the BLM AO. Alternatively, the holder may assume fish presence and design accordingly.
- Stream and marsh crossings are to be designed based on relevant reference reach or regional hydrologic data. To ensure that crossings provide for fish passage, all proposed crossing designs would adhere (as applicable) to the standards outlined in fish passage design guidelines developed by the U.S. Fish and Wildlife Service (USFWS) Alaska Fish Passage Program (USFWS 2019), USFWS Culvert Design Guidelines for Ecological Function (USFWS 2020), and Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings (Forest Service 2008). The most current version of these documents will be applied where appropriate.
- The crossing structure design shall account for permafrost, sheet flow, additional freeboard during breakup, and other unique conditions of the planning area.

SOP WAT/FISH-15 Stream channel design for any stream diversions, bypasses, stream relocations, or stream reconstruction projects would be designed to achieve stable channel form, floodplain connectivity, bedform diversity, and proper functioning condition of riparian vegetation as stated in the condition thresholds included in **Appendix G**, Aquatic and Riparian Resource Desired Conditions and Objectives.

SOP WAT/FISH-16 To prevent adverse impacts on aquatic species and water quality, water alone will be used for dust suppression within 300 feet of any fish-bearing stream or higher value wetland (e.g., emergent wetlands, fens, and shallow ponds) whenever practicable.

E.2.4 Vegetation and Nonnative Invasive Species (VEG/NNIS)

SOP VEG/NNIS-1 The Nonnative Invasive Species (NNIS) of Concern are all terrestrial and aquatic NNIS species identified by the BLM at the time of the authorized action, regardless of whether the species is present at that time. Planning, inventory, treatment, and monitoring are required for all authorized activities to ensure that the authorized (and associated) activities do not contribute to or result in the introduction, establishment, or spread of invasive species.

SOP VEG/NNIS-2 Invasive plants and aquatic organisms will be addressed in writing for every proposed action (and renewal or modifications to previously authorized activities) on BLM-managed lands, including the BLM projects and activities.

SOP VEG/NNIS-3 If NNIS of Concern are detected at any time during any authorized activity, the holder will report them to the BLM AO within 30 days of detection. The notification will include plant samples or photographs, or both, for identification, as well as global positioning system points or detailed location descriptions.

SOP VEG/NNIS-4 For all projects where NNIS of Concern are detected (before, during, or after the authorized activity) and eradication is deemed necessary by the BLM, the authorization holder will describe in writing the proposed eradication methods. The BLM will approve only those eradication plans that meet the requirements described in both the current BLM National Vegetation Management EIS and regionally specific Integrated Pest Management Plan. The application of herbicide or pesticide by the proponent will require the BLM's prior authorization and it will be restricted to approved application methods and active ingredients. Additional site-specific environmental analysis may be required.

SOP VEG/NNIS-5 All revegetation methods that require importation of materials that may include vegetative matter will only contain native plant species. This includes, but is not limited to, materials salvaged from the site and respread; weed-free seed or seedlings; weed-free topsoil or mulch; or material gathered under a special permit for site revegetation.

SOP VEG/NNIS-6 The BLM will require an invasive species monitoring plan that describes post-activity monitoring and includes a Hazard Analysis Critical Control Point Evaluation for all newly authorized activities that involve any of the following:

- Ground disturbance greater than 2 acres
- Ground disturbance of more than 0.5 miles in total length
- Operations within waterways or involving water handling operations
- Importation (from another part of the state or beyond) of equipment or substances, including weed-free seed, straw, gravel, topsoil, or mulch that could harbor invasive species

SOP VEG/NNIS-7 Initial post-activity monitoring for NNIS of Concern will be completed during the active growing season, within 1 year of project completion. If NNIS of Concern are identified, an eradication plan would be established as an addendum to the invasive species monitoring plan.

SOP VEG/NNIS-8 At the discretion of the BLM AO, authorization holders may be encouraged to work with surrounding land management agencies/owners to establish and/or maintain Cooperative Weed Management Areas or similar collaborative networks.

SOP VEG/NNIS-9 Off-highway vehicle use will comply with designations in the area and they may be subject to further restrictions to protect vegetation, soils, or wildlife habitat.

SOP VEG/NNIS-10 Disturbed stream banks will be recontoured and revegetated, or other protective measures will be taken, to prevent soil erosion into adjacent waters and provide stream bank stability. Active stream bank revegetation or other stabilization techniques (e.g., ADFG 2005) will be required for all erosion-prone areas, such as stream banks and near stream areas. Seeding or fertilization, or both, will be required for sites with little to no organic content (i.e., sites that are essentially bare mineral soil).

SOP VEG/NNIS-11 At the conclusion of operations, roads and other disturbed areas will be recontoured and revegetated in accordance with an approved reclamation plan or plan of operations. Revegetation will occur through seeding of native seed or by providing for soil conditions that allow the site to revegetate naturally; whichever provides the most effective means of reestablishing ground cover and minimizing erosion. The final land surface will be scarified to provide seed traps and erosion control.

SOP VEG/NNIS-12 If removed during operations, riparian vegetation will be reestablished.

SOP VEG/NNIS-13 When authorizing mineral material sites, avoid priority plant species and communities, if feasible. If mineral material disposals are authorized in vegetated areas, all overburden vegetation mats and associated natural debris will be saved and appropriately stored for use during site reclamation to facilitate vegetation recovery.

SOP VEG/NNIS-14 Existing roads and trails will be used for access where feasible, rather than creating new roads and trails.

SOP VEG/NNIS-15 The BLM may require modifications to or may disapprove a proposed activity that is likely to result in an impairment to the continued existence of a special status species or result in the destruction or adverse modification of a designated or proposed critical habitat.

SOP VEG/NNIS-16 All ground-disturbing authorizations and mineral material disposals will include stipulations to prevent the introduction and/or spread of NNIS.

E.2.5 Wildlife (WILD)

SOP WILD-1 For facilities that occupy more than 3 acres in known or suspected wildlife migration routes or movement corridors, and which have the potential to significantly impact such migration or movement, the BLM AO may require the development of an ecological land classification map (or similar instrument) of the development area as part of the permitting process. The map will integrate geomorphology, surface form, and vegetation at a scale, resolution, and level of positional accuracy that allows for detailed analyses of alternative development. The map would be provided to the BLM AO in advance of issuance of an authorization; such that ground-based wildlife and/or vegetation habitat surveys may be conducted prior to the BLM AO approval of exact facility location.

SOP WILD-2 Employ industry-accepted best management practices to prevent raptors and other birds from colliding with or being electrocuted by utility lines, alternative energy structures, towers, and poles.[2] In important bird areas, if possible, bury utility lines. Where raptors are likely to nest in human-made structures (such as cell phone towers) and such use could impede operation or maintenance of the structures or jeopardize the safety of the raptors, equip the structures with devices engineered to discourage raptors from building nests. An alternative is to equip the structures with nesting platforms that would safely accommodate raptor nests without interfering with structure performance.

Follow best management practices, in accordance with the Avian Power Line Interaction Committee, for power lines. Guidelines for towers should follow those of the USFWS.[3]

SOP WILD-3 The use of guy wires on towers should be avoided, if possible; however, if tall towers require the use of guy-wired apparatus, regardless of purpose, they will be marked in accordance with the USFWS guidance,[4] or a more current version of that guidance.

SOP WILD-4 Authorization holders must take the following precautions to avoid attracting wildlife to food, garbage, and other attractants:

- Storage of food in bear-proof containers
- Use of bear-resistant containers for all garbage, petroleum products, and other bear attractants
- Prohibition from feeding wild animals

SOP WILD-5 To prevent the entrapment of small mammals and birds, all hollow pipes or tubes that are 2 to 10 inches in diameter will be filled or capped prior to installation (unless fixed horizontally). Mining claim posts will be capped.

SOP WILD-6 Employ industry-accepted best management practices to prevent the nesting, denning, or shelter of wildlife (especially ravens, raptors, and foxes where ground-nesting birds are sensitive to associated artificial increases in predators).

SOP WILD-7 Authorized activities in the vicinity of eagle nests must be conducted in accordance with the Bald and Golden Eagle Protection Act and the USFWS Alaska Region recommendations. That may include restrictions on activities such as buffers around nests or seasonal restrictions on activities.

SOP WILD-8 The authorization holder will ensure that all associated operations are conducted to avoid or minimize impacts on migratory birds. The primary mechanism to avoid and minimize impacts is to plan to conduct work that may disturb wildlife outside of the nesting season. The USFWS provides region-specific guidance for Alaska on dates to avoid land disturbance and vegetation clearing. The BLM may require surveys for species deemed sensitive prior to authorized activity.

SOP WILD-9 The BLM may require applicants to conduct inventories for special status species and to avoid or minimize impacts on these species, pursuant to the BLM policy and the Endangered Species Act. The BLM may recommend modifications to any proposals. The BLM may not approve or may require modifications to a proposed activity that is likely to jeopardize the continued existence of a proposed or listed threatened and endangered or sensitive species or result in the destruction or adverse modification of a designated or proposed critical habitat.

---

[2] APLIC 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA. Internet website: http://www.aplic.org/.

[3] Siting, Construction, Operation, and Decommissioning of Communications Towers. September 14, 2000.

[4] Ibid.

SOP WILD-10 Where practicable, authorized use may be redirected to protect special status species habitat or to otherwise maintain public land health through avoidance of sensitive habitat. If impacts on special status species populations and habitats cannot be avoided, the applicant (or the BLM for internal actions) will develop mitigation measures to reduce impacts.

SOP WILD-11 Design and construct rights-of-way to avoid and minimize impediments to the free movement of wildlife and to allow for the safe, unimpeded passage of the public, with deference to those participating in traditional subsistence activities. Applicants must demonstrate that they have considered such features in their project design and construction planning. Examples of such practices include:

- Aboveground pipelines will be elevated a minimum of 7 feet, measured from the ground to the bottom of the pipeline at vertical support members to facilitate wildlife movement under the pipe.
- Ramps over pipelines (or burial of pipelines) may be required in areas where facilities or terrain may funnel wildlife movement.
- A minimum distance of 500 feet will be maintained between aboveground pipelines and roads.
- Road design and construction no higher than necessary to accommodate their intended purpose.

SOP WILD-12 Locate and/or minimize linear rights-of-way or special use authorizations to reduce disturbance to identified important wildlife habitat. Coordinate road construction and use among authorization holders and applicants. Close and reclaim existing duplicate roads.

SOP WILD-13 To prevent wildlife entanglement, the use of erosion control materials that contain plastic will be avoided. Temporary erosion and sediment control products that either do not contain netting, or that contain netting manufactured from 100 percent biodegradable nonplastic materials, such as jute, sisal, or coir fiber, shall be used whenever possible. If netting is used, it will have a loose-weave, wildlife-safe design with movable joints between the horizontal and vertical twines, allowing the twines to move independently and thus reducing the potential for wildlife entanglement. Silt fences reinforced with metal or plastic mesh, which can also cause an entanglement hazard to wildlife, shall be avoided when practicable. Temporary erosion and sediment control products, when no longer required, should be promptly removed.

SOP WILD-14 Consult with Alaska Department of Fish and Game area biologists as appropriate to ensure consistency with species management required by the State.

E.2.6 Wildland Fire Management (FM)

SOP FM-1 Authorization holders and casual users will be held financially responsible for any actions or activity that results in a wildland fire. Costs associated with wildland fires include damage to natural or cultural resources and costs associated with any suppression action taken on the fire.

SOP FM-2 The BLM will not be held responsible for protecting authorization holder's structures or their personal property from wildland fire. It is the responsibility of authorization holders to mitigate and minimize risk to their personal property and structures from wildland fire, following the conditions in their authorizations.

SOP FM-3 Gas-powered equipment must be equipped with manufacturer-approved and functional spark arresters.

SOP FM-4 To avoid potential impacts on aquatic life, the application of fire chemicals, including retardant, will be avoided within 300 feet of waterbodies. Deviations are acceptable when life or property is threatened, and fire chemicals are reasonably expected to alleviate the threat. The BLM AO may approve a deviation if potential damage to natural resources outweighs the impact to aquatic resources.

SOP FM-5 Off-road use of heavy equipment and other motorized vehicles in wildland fire suppression activities will be conducted in a manner that: minimizes erosion, riparian area damage, water quality degradation, fish habitat degradation, and stream channel sedimentation.

SOP FM-6 Off-road use of heavy equipment and other motorized vehicles requires approval of the BLM AO.

SOP FM-7 Repair suppression damage in accordance with a repair plan provided by the BLM Field Office to the protection agency.

SOP FM-8 Utilize active management best management practices such as mowing; pre-commercial and commercial thinning; manual and mechanical cutting; linear fuel breaks; biological and chemical treatment; access road maintenance; prescribed fire and controlled burns; timber salvage; timber and biomass sales; piling; yarding; removing vegetative material; selling of vegetative products (including, but not limited to, firewood, biomass, timber, and fence posts); application of pesticides, bio-pesticides and herbicides; seeding native species; invasive species management; jackpot and pile burning; fuels conversion to a less flammable type such as spruce to hardwoods; shear blading; and shaded fuel breaks.

SOP FM-9 Utilize fire management options to capitalize on resource benefits from wildfires where possible.

SOP FM-10 Maximize the use of natural barriers and physical features (such as roads and rights-of-way) within landscapes when designing fuel breaks and other vegetative treatments.

E.2.7 Visual Resource Management (VRM)

SOP VRM-1 Facilities allowed in the viewsheds of developed recreation sites shall be screened with vegetation or blend in with the color or line form of the surrounding landscape. Consideration to the primary uses of established utility and transportation corridors will be considered, where appropriate, as the line and form of the surrounding landscape.

E.2.8 Forestry (FOR)

SOP FOR-1 Timber disposals will include buffers to prevent disturbance of priority fish species habitat and sedimentation into streams. Buffer widths will be dependent on harvest method, season of harvest, equipment used, slope, vegetation, land use allocation (areas of critical environmental concern [ACECs] or High Value Watersheds) and soil type. Winter operations will be considered to avoid the need for road building and to reduce impacts on soils, vegetation, and riparian areas.

E.2.9 Mineral Materials and Locatable Minerals (MIN-LMM)

SOP MIN-LMM-1 Whenever possible, use existing upland material sources that meet suitability and economic needs. Using material from wetlands, lakes, and 100-year floodplains will be avoided, unless no feasible upland alternative exists. Sales or permits for in-stream mineral materials extraction within an active channel will not be allowed in priority fish species spawning habitat. Mineral material extraction from lakes, active floodplains, riparian zones, wetlands, deltas, lakes, and active or inactive stream or river channels should be avoided and is subject to constraints developed through project-specific NEPA analysis.

SOP MIN-LMM-2 When authorizing mineral material sale sites, avoid habitats important to local fish populations (such as fish spawning and overwintering sites). Avoid key geomorphic features, such as the river cut banks and associated riparian zones and springs, wetlands, and active channels of small, single channel rivers. Avoid mineral material extraction from habitats important to wildlife populations, such as (but not limited to) calving areas and raptor nesting sites. Sites directly affecting these habitats should not be considered unless alternative sites are not available.

When authorizing mineral material sale sites, avoid priority plant species and communities.

SOP MIN-LMM-3 When mining mineral materials in 100-year floodplains, maintain buffers that will protect active channels and keep them in their original locations and configurations.

SOP MIN-LMM-4 Use existing access routes during the season for which the route was designed and developed.

SOP MIN-LMM-5 Upon closure of mining operations, dispose of all: mining improvements, deleterious materials and substances, contaminants, and hazardous and solid waste. The latter includes scrap steel, derelict mining machinery, and parts. These materials will be disposed of in accordance with applicable federal and state laws and regulations. Burial is not an acceptable form of disposal.

E.2.10 Lands and Realty (LR)

SOP LR-1 Consider previously disturbed sites prior to allowing uses on undisturbed sites.

E.2.11 Travel and Transportation Management (TTM)

SOP TTM-1 For the BLM-authorized activities that require ice thickness be tested before equipment over 1,500 pounds curb weight is transported, this would be done to confirm adequate ice, as determined by the U.S. Army Corps of Engineers' ice engineering table.

Some travel up and down streambeds would be allowed by the individual vehicles collecting snow from river drifts or ice aggregate from the channel (where ice is grounded). Rivers and streams shall be crossed at areas of grounded ice, whenever possible.

SOP- TTM-2 For the BLM-authorized activities, petroleum, oil, and lubricants could be transported in amounts greater than 1,000 gallons over ice only under the direction of a licensed professional engineer.

E.2.12 National Trails (NAT)

SOP NAT-1 To eliminate, minimize, or limit the spread of NNIS on BLM-managed lands, the BLM will authorize feed and mulch (hay cubes, hay pellets, or straw, for example) that are certified as weed-free through the Alaska Weed-Free Forage Certification Program (or other programs with approval of the BLM AO). Where Alaska-certified sources are not available, locally produced forage and mulch may be used, with the approval of the BLM AO. If no certified weed-free or local sources are available, then other products may be used, with the approval of the BLM AO.

E.2.13 Hazardous Materials and Health and Human Safety (HAZMAT)

SOP HAZMAT-1 The burial of garbage is prohibited. All putrescible waste will be incinerated, backhauled, or composted in a manner approved by the BLM AO. All unburnable solid waste will be backhauled and disposed of in an approved waste disposal facility, in accordance with the regulations and procedures of the U.S. Environmental Protection Agency and Alaska Department of Environmental Conservation.

SOP HAZMAT-2 If wastes are incinerated on-site, the authorization holder will ensure that only solid waste combustibles that originate from on-site are incinerated, and that they are incinerated in accordance with Environmental Protection Agency and Alaska Department of Environmental Conservation requirements.

The authorization holder will ensure that incineration of garbage using burn barrels is conducted in compliance with the Alaska Division of Forestry Burn Barrell Specification. These specifications can be found at http://dnr.alaska.gov/burn/specifications.

No solid waste is to remain on-site for more than 90 days unless authorized in writing by the BLM AO.

SOP HAZMAT-3 (Note: This SOP restates current State requirements and they will be adjusted according to any future updates to State requirements). Pit privies must be located at least 100 feet from any waterbody and 100 feet from the high-watermark of streams, rivers, or lakes. The BLM AO may require a larger separation distance, to protect high-value resources. No septic system will be installed without the BLM AO's approval and it must comply with 18 Alaska Administrative Code, Subsection 72.030. Gray water must be filtered before being released to the surface, and it must be discharged in a way that does not cause erosion. Gray water may not be released to any waterbody. If regulations and procedures cannot be met, all wastewater must be collected and transported to a State-approved disposal facility.

Upon closure of a campsite, a pit privy must be sprinkled with lime and then completely backfilled with a minimum of 2 feet of over-material when the pit has reached capacity, or the operation is terminated. The surface area must be covered and regraded to its approximate original appearance.

SOP HAZMAT-4 All hazardous materials and petroleum, oil, and lubricants will be stored in containers that are compatible with the material being stored. Containers will be labeled with the: responsible party's name, contents of the container, date the container was purchased, and date the container was filled.

SOP HAZMAT-5 Storage of petroleum, oil, and lubricants greater than or equal to 55 gallons at any site will require secondary containment. The containment area must have the following characteristics:

- Be constructed to hold at least 110 percent of the largest container
- Be lined with an impermeable liner that is free of cracks or gaps
- Be compatible with the contents stored
- Be sufficiently impervious to contain leaks or spills

SOP HAZMAT-6 When 40 Code of Federal Regulations (CFR) 112 requires a Spill Prevention, Control, and Countermeasure plan to be prepared for activities occurring on BLM-managed lands, a copy shall be provided to the BLM AO for awareness purposes.

SOP HAZMAT-7 Leaking equipment must have a drip basin placed under the leak area. Also, the basin must be protected from rainwater collection to ensure no release to the surrounding environment. When equipment maintenance has the potential to release fluids, an impermeable liner must be used to ensure that spills are contained.

SOP HAZMAT-8 Notice of any reportable spill (as required by 40 CFR, Subpart 300.125 and 18 Alaska Administrative Code, Section 75.300) will be given to the BLM AO as soon as possible, but no later than 24 hours after occurrence. This requirement is in addition to, and does not replace, reporting requirements under other federal and state law. All spills will be contained and cleaned up in accordance with Alaska Department of Environmental Conservation guidance as soon as the release has been identified, unless health and safety of personnel is at risk.

A copy of any report required or requested by any federal agency or state government as a result of a reportable release or spill of any toxic substance will be furnished to the BLM AO, concurrently with filing the reports to the involved federal agency or state government.

SOP HAZMAT-9 If refueling cannot be avoided within the riparian zone or within 100 feet of a waterbody, a catch basin and petroleum, oil, and lubricant-type absorbent pads will be used to collect any overflow.

SOP HAZMAT-10 With the exception of watercraft, water pumps, or aircraft, fueling operations for motorized apparatus will not occur in riparian zones (from the ordinary high-watermark to the outer edge of riparian vegetation) nor within 100 feet of a waterbody, whichever is greater. These activities also will not be allowed within 500 feet of the active floodplain of any fish-bearing waterbody whenever practicable.

SOP HAZMAT-11 For oil and gas operations and mining plans of operation, a hazardous materials emergency contingency plan will be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan will include a set of procedures to ensure prompt response, notification, and cleanup of a hazardous substance spill or threat of a release. The plan will include a list of resources available for response, such as heavy-equipment operators, spill cleanup materials, and companies. It also will include names and phone numbers of federal and state contacts.

SOP HAZMAT-12 For oil and gas operations, all pumpable solid, liquid, and sludge waste will be disposed of by injection, in accordance with U.S Environmental Protection Agency, Alaska Department of Environmental Conservation, and Alaska Oil and Gas Conservation Commission regulations and procedures. The BLM AO may allow alternate disposal if the lessee demonstrates that subsurface disposal is not feasible or prudent and the alternative method would not result in adverse environmental effects.

SOP HAZMAT-13 For oil and gas operations, mining operations, and other authorizations, sufficient oil spill cleanup materials, such as absorbents and containment devices, will be stored at all fueling points and vehicle maintenance areas. Field crews will carry such materials on all overland moves, seismic work trains, and similar overland moves by heavy equipment. All personnel will be trained to properly respond to spills.

E.2.14 Subsistence (SUB)

SOP SUB-1 The BLM AO may require authorization holders to provide information to potentially affected subsistence communities regarding the timing, siting, and scope of a proposed activity.

SOP SUB-2 The BLM AO may require authorization holders to consult with potentially affected subsistence communities to receive input regarding ways to minimize impacts on subsistence. Authorization holders will be required to provide the BLM with documentation of their consultation.

SOP SUB-3 Authorization holders are prohibited from intentionally disturbing individuals engaged in subsistence activities.

SOP SUB-4 Roads must be designed, constructed, maintained, and operated to allow for continued subsistence use and access to traditional subsistence hunting, fishing, and gathering areas.

SOP SUB-5 Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods would be kept to a minimum.

E.2.15 Mining and Fluid Mineral Leasing (MIN-LEA)

SOP MIN-LEA-1 In mining and fluid mineral leasing operations, all process water and groundwater seeping into an operating area must be treated appropriately prior to reentering the natural water system. One method is to use settling ponds.

SOP MIN-LEA-2 For oil and gas operations and mining plans of operation, a hazardous materials emergency contingency plan will be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan will include a set of procedures to ensure prompt response, notification, and cleanup in the event of a hazardous substance spill or threat of a release. The plan will include the names and phone numbers of federal and state contacts. It also will include a list of resources available for response, such as heavy-equipment operators, spill cleanup materials, or companies.

Leasing stipulations are specific to fluid mineral activity, including exploration, development, and production. These leasing stipulations are included in a lease in addition to the standard lease terms. Fluid minerals include oil and gas, geothermal, and coal bed natural gas.

Additional site-specific leasing stipulations may be added if they are determined to be necessary through further analysis. Leasing stipulations may be modified or waived by the BLM AO, pursuant to 43 CFR 3101.1-4 and Washington, DC, Office Instruction Memorandum 2008-032.

The environmental analysis prepared for fluid mineral development (such as applications for permit to drill or sundry notices) will address proposals to except, modify, or waive a leasing stipulation. To except, modify, or waive a stipulation, the environmental analysis would need to show the following:

- The circumstances or relative resource values in the area had changed following issuance of the lease
- Less restrictive requirements could be developed to protect the resource of concern
- Operations could be conducted without causing unacceptable impacts
- The resource value of concern does not occur within the lease area

An exception exempts the holder of a lease from the leasing stipulation on a one-time basis. A modification changes the language or provisions of a leasing stipulation, either temporarily or for the term of the lease. A waiver permanently exempts the leasing stipulation.

Compliance with leasing stipulations is monitored by the BLM AO or representative. Noncompliance may result in monetary fines or operation shutdown.

E.3 FLUID MINERAL LEASING

E.3.1 Fluid Mineral Leasing Stipulations

SOILS OBJECTIVE: Maintain the chemical, physical, and biotic properties of soils; this includes maintaining soil productivity, stability, and biotic properties. This would prevent excessive erosion and potential mass wasting and it would improve the likelihood of successful reclamation.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	Approved RMP/ROD
Apply controlled surface use stipulations to fluid mineral leases on slopes greater than 35 percent and in areas with sensitive soils. Before sensitive soils are disturbed, a plan must be approved by the BLM AO. The plan must demonstrate the following: (1) no other reasonable alternatives exist for relocating the activity, (2) the activity would be located to reduce impacts on soil and water resources, (3) surface runoff and sedimentation would be adequately controlled, (4) on- and off-site areas would be protected from accelerated erosion, (5) no areas susceptible to mass wasting would be disturbed, and (6) surface-disturbing activities would be prohibited or appropriate mitigations would be applied during extended wet periods.	Slopes greater than 35 percent in areas with sensitive soils	**Exception:** The BLM AO may grant an exception to this stipulation if the operator can demonstrate that the proposed action will not contribute to degradation of the soil resource (e.g., excessive soil erosion, mass wasting, and/or lost productivity) or downslope resource conditions (e.g., reduced water quality due to sedimentation). **Modification:** None **Waiver:** None	**Yes**

RIPARIAN OBJECTIVE: Protect the unique biological and hydrological features and functions associated with perennial and intermittent streams, lakes, ponds, reservoirs, floodplains, wetlands, and riparian areas.

Stipulation	**Area Where It Applies**	**Exception, Modification, Waiver**	**Approved RMP/ROD**
Surface occupancy and use is prohibited in perennial or intermittent streams, lakes, ponds, reservoirs, 100-year floodplains, wetlands, and riparian areas.	100-year flood plain	**Exception:** No exceptions would be allowed in streams, natural lakes, or wetlands. The BLM AO may grant an exception for riparian areas, floodplains, and artificial ponds or reservoirs if the operator can demonstrate that (1) there are no practicable alternatives to locating facilities in these areas, (2) the proposed actions would maintain or enhance resource functions, and (3) all reclamation goals and objectives would be met. **Modification:** The BLM AO may modify the boundaries of the stipulated area if it is determined that portions of the leasehold do not include these types of areas. **Waiver:** The BLM AO may waive this stipulation if the entire leasehold does not include these types of areas.	**Yes**

WATER OBJECTIVE: Maintain sufficient surface water and groundwater flows to keep hot springs beneficial uses and the unique ecosystems.

Stipulation	**Area Where It Applies**	**Exception, Modification, Waiver**	**Approved RMP/ROD**
Surface occupancy and use is prohibited within a 160-acre area centered around hot springs.	Hot springs	**Exception:** This stipulation does not apply to geothermal leases or wells. **Modification:** none **Waiver:** none	**Yes**
Surface occupancy and use is prohibited within 0.25 miles of lentic areas.	Lentic areas	**Exception:** none **Modification:** none **Waiver:** none	**Yes**

WILDLIFE OBJECTIVE: Minimize impacts on wildlife species from the BLM-authorized activities.

Stipulation	**Area Where It Applies**	**Exception, Modification, Waiver**	**Approved RMP/ROD**
Disturbance caps would be applied to discretionary activities in the following: • Dall sheep habitat area (5 percent disturbance cap on discretionary authorized activities)	Identified Dall sheep habitat areas	**Exception:** The BLM AO may grant an exception if Dall sheep are not currently using the area. **Modification:** None **Waiver:** This stipulation may be waived if Dall sheep data show changes in current habitat use areas.	**Yes**

Stipulation	**Area Where It Applies**	**Exception, Modification, Waiver**	**Approved RMP/ROD**
No surface occupancy or use is allowed in the Dall sheep habitat area, which contains crucial licks.	Dall sheep habitat area, Sukakpak Mountain ACEC/Snowden Mountain ACEC	**Exception:** The BLM AO may grant an exception to a fluid mineral lease only where the proposed action would have the following impact: • Would not have direct, indirect, or cumulative effects on Dall sheep or its habitat • Is proposed to be undertaken as an alternative to a similar action on a nearby parcel, and it would provide a clear conservation gain to Dall sheep **Modification:** No modifications **Waiver:** None	**Yes**
Manage the following areas as open to fluid mineral leasing, subject to timing limitations for exploration, development, or facility construction within 0.5 miles of any known raptor nests, from April 15 through August 15 (from March 15 through July 20 for gyrfalcon nests).	Raptor nests	**Exception:** The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** Season may be adjusted, based on actual nest occupancy. **Waiver:** If no known occupied nests are present, a waiver can be granted.	**Yes**
No surface occupancy or use is allowed within 0.5 miles of active golden eagle nests.	Golden eagles	**Exception:** The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** Season may be adjusted, based on actual nest occupancy. **Waiver:** If no known occupied nests are present, a waiver can be granted.	**Yes**

Stipulation	Area Where It Applies	Exception, Modification, Waiver	Approved RMP/ROD
To protect threatened, endangered, or other special status species and their habitats, the lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened or endangered species. The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid an approved activity that would contribute to a need to list such a species or its habitat. The BLM may require a modification to or disapprove a proposed activity that is likely to jeopardize the continued existence of a proposed or listed threatened and endangered species or result in the destruction or adverse modification of a designated critical habitat.	All the BLM-managed lands	**Exception:** None **Modification:** None **Waiver:** None	**Yes**

AREAS OF CRITICAL ENVIRONMENTAL CONCERN OBJECTIVE: Protect the identified relevant and important values for each ACEC.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	Approved RMP/ROD
Surface occupancy and use are prohibited in the following ACECs: 1. Accomplishment Creek 2. Galbraith Lake 3. Mentanontli River/Lake Todatonten 4. Midnight Dome/Kalhabuk 5. Nugget Creek 6. Poss Mountain 7. Snowden Mountain 8. West Fork Atigun River Within the stream order-based 100-year floodplain buffer areas, the following special management applies: 9. Hogatza River Tributaries 10. Huslia River 11. Indian River 12. Jim River 13. Klikhtentotzna Creek 14. Sethkokna River 15. South Fork Koyukuk River 16. Tozitna River 17. Upper Teedriinjik (Chandalar) River 18. Wheeler Creek	ACECs	**Exception:** Unless specific lands are designated as right-of-way exclusion areas, ACEC designations would not prevent or preclude authorized access to adjacent lands not managed by BLM. Additionally, ACEC designations would not prevent any rights-of-way guaranteed under section 1323(b) of the Alaska National Interest Lands Conservation Act. Right-of-way avoidance areas within ACECs are areas that would be available for authorized activities that may entail special stipulations or consideration of other site-specific alternatives to protect identified relevant and important values for the subject ACEC(s) involved. The BLM would work with any project proponent to design a project plan in right-of-way avoidance areas that meets the proponent's needs and protects relevant and important ACEC values. **Modification:** none **Waiver:** none	**Yes**

E.3.2 Standard Lease Terms

All fluid mineral leases would include the standard lease terms contained in the BLM Form 3100-11 (Offer to Lease and Lease for Oil and Gas, U.S. Department of the Interior, BLM, October 1992, or later addition). The standard lease terms provide the lessee with the right to use the leased land to explore for, drill for, extract, remove, and dispose of fluid mineral deposits that are under the leased lands. The standard lease terms also require that operations be conducted in a manner that minimizes impacts on the: land, air, water, cultural, biological, and visual elements of the environment, as well as other land uses or users.

E.4 REFERENCES

ADFG (Alaska Department of Fish and Game). 2005. Streambank revegetation and protection. A guide for Alaska. State of Alaska. April 2005. Alaska Department of Fish and Game Division of Sport Fish. Internet website: https://www.adfg.alaska.gov/static/home/library/pdfs/habitat/98_03.pdf.

FEMA (Federal Emergency Management Agency). 2015. Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input. FEMA-2015-0006. Internet website: https://www.regulations.gov/document?D=FEMA-2015-0006-0358

Forest Service (U.S. Department of Agriculture, Forest Service). 2008. Steam Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings. 7700-Transportation Mgmt. 0877 1801-SDTDC. San Dimas, California. August 2008. Internet website: https://www.fs.fed.us/eng/pubs/pdf/StreamSimulation/hi_res/%20FullDoc.pdf.

USFWS (U.S. Fish and Wildlife Service). 2019. Fish Passage Design Guidelines. U.S. Fish and Wildlife Service Alaska Fish Passage Program. March 21, 2019.

______. 2020. Culvert Design Guidelines for Ecological Function, Alaska Fish Passage Program. Internet website: https://8d4bf1c8-f414-4c75-84e3-fc4d491fa659.filesusr.com/ugd/93b6b4_28b3142c87804e5f89c60f34ea76996d.pdf.

This page intentionally left blank.

Appendix F

Adaptive Management Framework

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX F. ADAPTIVE MANAGEMENT FRAMEWORK **F-1**

F.1 Landscape Resource Values F-1
  F.1.1 Rationale F-2
  F.1.2 Objectives F-3
  F.1.3 Strategy F-3
  F.1.4 Management F-4
  F.1.5 Connectivity Corridors (LANDSCAPE) F-4
  F.1.6 Ecological Benchmarks (BENCHMARK) F-5
F.2 Ecological Benchmarks Identification F-5
F.3 Connectivity Corridors F-6
F.4 References F-11

MAPS

Page

F-1 BEACONS Benchmarks F-9
F-2 Alternative E: Connectivity Corridors F-10

ACRONYMS AND ABBREVIATIONS	Full Phrase
BEACONS	Boreal Ecosystems Analysis for Conservation Networks
BLM	Bureau of Land Management
CSU	conservation system unit
Department	U.S. Department of the Interior
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act
RMP	resource management plan
ROW	right-of-way

Appendix F. Adaptive Management Framework

F.1 LANDSCAPE RESOURCE VALUES

It is the U.S. Department of the Interior (Department) policy (522 Department Manual 1) to encourage the use of adaptive management, as appropriate, as a tool in managing lands and resources. To this end, bureaus are directed (whenever using adaptive management) to "conduct appropriate and applicable environmental monitoring to determine resource status, promote learning, and evaluate progress toward achieving objectives" and to "incorporate adaptive management principles, as appropriate, into policies, plans, guidance, agreements, and other instruments for the management of resources under the Department's jurisdiction."

Department policy (604 Department Manual 1) also directs bureaus to achieve landscape goals through development of integrated landscape-level strategies that inform management decisions and work processes, and that promote:

- incorporation of best available science;
- consideration of multiple scales;
- interdisciplinary, science-based understanding of landscape dynamics;
- integration of science, management, and monitoring and evaluation efforts; and
- resilience to environmental change.

That policy also links adaptive management and landscape objectives, requiring bureaus to evaluate the effectiveness of management actions using monitoring indicators to determine if management actions are achieving desired landscape outcomes and, if not, to determine the causative factors to inform changes in management actions to achieve the desired outcomes.

The Bureau of Land Management (BLM) policy (Instruction Memorandum 2014-125) directs the BLM to consider relevant data and information from rapid ecoregional assessments and other landscape assessments during land use planning and project-level decision-making.

BLM policy (Instruction Memorandum 2023-043) directs the BLM to follow Assessment, Inventory, and Monitoring principles and established Assessment, Inventory, and Monitoring implementation procedures in land use plan effectiveness evaluations of renewable ecological resources on BLM-managed lands.

The Federal Land Policy and Management Act (FLPMA) requires the BLM to maintain an inventory of all public lands and their resource and other values. The BLM also must keep the inventory current to reflect changes in conditions and to identify new and emerging resources and other values. The FLPMA also mandates that the BLM relies on the inventory of the public lands, their resources, and other values in developing land use plans.

Advances in landscape science since the previous resource management plan (RMP) allow identification and inventory of landscape resource values that previously could not be inventoried in a manageable format. These include identifying and inventorying potential ecological benchmarks—areas, or networks of areas, that are representative of the range of ecological characteristics of an ecoregion—and areas suitable to function as structural linkages between jurisdictions with missions more narrowly focused on conservation, thus providing for resilience to environmental change.

Magness et al. (2018) published an inventory of structural landscape connectivity in the region. The Boreal Ecosystems Analysis for Conservation Networks (BEACONS) project inventoried potential ecological benchmarks in the planning area, incorporating data and information from rapid ecoregional assessments and other landscape assessments. These two inventory efforts provide a framework to comply with direction in the FLPMA and to formulate a landscape-scale adaptive management strategy in compliance with Department and BLM policy. The goal is to draw on best available science to understand conditions and trends across multiple scales, adapt to changes in conditions and trends, promote resilience to environmental change, and facilitate informed decisions. These will be used to manage healthy, productive lands that support the BLM's multiple use mission over the life of the plan.

The connectivity corridors and ecological benchmarks were determined using the best available data, in this case, the scientific modeling described above. These data have not been ground-truthed, and ground-truthed data are not available at the time of the Approved RMP.

F.1.1 Rationale

Alaska's ecosystems are changing. Documented changes include the following:

- Temperature: Consistently warmer average annual temperatures, longer growing seasons, an increased number of growing degree days, fewer extreme cold days per year, and earlier average river breakup (Thoman and Walsh 2019; IPCC 2014)
- Precipitation: Increased annual precipitation, more frequent winters with freezing rain, shorter snow seasons, and shrinking perennial snowfields in key parts of the planning area (Thoman and Walsh 2019)
- Permafrost: Changing permafrost stability and distribution (Hinzman et al. 2006) and warmer deep permafrost temperatures across northern and interior Alaska (Thoman and Walsh 2019)
- Fire regime: Changing fire regimes (Kaisischke et al. 2006) characterized by more frequent large fire seasons and more smoky days (Thoman and Walsh 2019)
- Plants: An advancing tree line, expanding shrub species range, conditions favoring broadleaf species over conifers and moss (IPCC 2014), and greening of North Slope tundra (Thoman and Walsh 2019)
- Animals and Fish: Changing animal populations (IPCC 2014), range expansion for beavers, and large fish die-offs attributed to high water temperatures (Thoman and Walsh 2019)

Maintaining connectivity corridors, resilience, and adaptability are key to managing for such changes (Cooke 2017; Beever et al. 2015; Heller and Zavaleta 2009). Furthermore, managing for such changes is essential to carrying out the BLM's multiple use mission. Resource development activities, both large and small, influence ecosystem processes through the footprint of facilities and infrastructure, their supply chain, and their production stream. Conversely, ecosystem processes influence the economic margins and feasibility of both current and future resource development.

Communities whose economies depend on public lands are often the most seriously affected by ecological degradation (BLM 1994). Similar relationships apply for social considerations, such as the quality of recreational experiences, clean water availability, and other ecosystem services; thus, healthy resource industries and communities depend on the sustained yield of healthy, productive ecosystems. Monitoring the condition and trends and corresponding adaptive management are essential for achieving that sustained yield.

F.1.2 Objectives

The planning area is unique in that it overlaps eight ecoregions, it is characterized by ecosystems adapted to large fires, and it contains large tracts of intact land where landscape-scale ecological processes function with minimal disruption. In addition, BLM-managed lands in the planning area are next to, and thus serve as important connections between, nine conservation system units (CSUs) under the Alaska National Interest Lands Conservation Act. Most BLM planning must be a reactive approach to maintaining or restoring ecological integrity and connectivity corridors; nevertheless, these characteristics create the opportunity in this planning process to proactively manage for the sustained yield of landscape resilience, connectivity, and adaptability. This is to support multiple use activities, while maintaining functional landscapes.

F.1.3 Strategy

The BLM proposes to manage land uses to sustain existing landscape connectivity in a small percentage of BLM-managed lands identified through the inventory described above. The BLM also proposes to manage land uses to sustain ecological representation within a selected set of potential ecological benchmarks. It would do this by monitoring changes throughout the benchmarks using the BLM Assessment, Inventory, and Monitoring framework and other appropriate monitoring methodologies as well as adapting land use management in the benchmarks, if indicated. In addition to sustaining ecological representation within limited areas, this would allow the BLM to distinguish changes associated with authorized land uses from changes associated with other change agents. This would help inform management of authorized activities throughout the planning area.

Local indigenous knowledge is valuable to implementing the management actions in this RMP as well as aiding monitoring and adaptive management strategies. The BLM would seek to engage local communities and tribal governments in co-stewardship opportunities for monitoring resource conditions that can aid in adaptive management for implementation level actions and inform the adaptive management framework.

Ecological Benchmarks

BEACONS is a conservation matrix model (BEACONS 2017) that is designed to be used for proactive planning in large, intact landscapes. BEACONS identifies areas in a landscape that have the attributes needed to function as ecological benchmarks. Benchmark areas are intact, hydrologically connected areas large enough to accommodate natural disturbance regimes.

Benchmark networks are groups of benchmark areas that, collectively, are representative of key ecological indicators for an ecoregion (Cooke 2017). They can serve as references for understanding the natural dynamics of ecosystems and their response to human activities. They also are buffers to environmental stressors.

In addition to the fundamental benchmark properties (intactness, hydrologic connectivity, size, and ecoregion representation), potential benchmarks can be compared or ranked based on how well they represent other attributes such as land status, amount of priority species habitat, or resilience.

Connectivity Corridors

One aspect of managing for adaptability is allowing for range-wide adaptations of species, which may include redistribution on the landscape as ecosystems change. Lands managed for multiple uses also can serve as connectivity corridors or linkages between lands managed for conservation, which could accommodate these changes. Magness et al. (2018) used methods outlined in Brost (2010) and Jenness et al. (2011) to identify land facet-based connectivity corridors between CSUs in the planning area.

F.1.4 Management

Both ecological benchmarks and connectivity corridors would be treated as resources on the landscape with defining attributes, and they would be managed for sustained yield for those defining attributes. Management would be accomplished by applying the standard operating procedures (see RMP/environmental impact statement [EIS], **Appendix F**).

F.1.5 Connectivity Corridors (LANDSCAPE)

Landscape connectivity corridors would be analyzed for all discretionary activities that disrupt habitat connectivity, cause habitat fragmentation, or present barriers to facilitating adaptive migration and ecological reorganization in response to climate change and other drivers of systematic ecological change. In all cases, analysis of impacts for proposed activities in the corridors would include careful consideration of cumulative impacts on habitat connectivity.

Mitigation would be required for direct, indirect, or cumulative impacts that increase habitat fragmentation, reduce structural or functional connectivity. Where relevant, required mitigation may include:

- Seasonal or time restrictions on activities
- Burial of infrastructure or facilities
- Wildlife escapement design features, where needed
- Siting and orientation of infrastructure and facilities to allow maximum opportunities for unfettered wildlife movement
- Use of vegetation to provide screened and unfragmented movement corridors around infrastructure and facilities
- Other measures determined necessary by the Authorized Officer

Within the Central Yukon Field Office, there are approximately 371,000 acres of BLM-administered lands considered connectivity corridors. See **Table F-1** for a breakdown of right-of-way (ROW) and locatable minerals related management actions by acreage.

Table F-1

Acreage[1] of Connectivity Corridors by Management Action under the Approved RMP

Management Action	Approved RMP
Currently withdrawn from locatable mineral entry	100,000
Currently withdrawn but open to metalliferous	137,000
Recommended for withdrawal from locatable mineral entry	0
Open to locatable mineral entry (including lands segregated by selection)	133,000
Open, State or Native selection, segregated	81,000
ROW avoidance area	42,000
ROW exclusion area	0
Open to ROW	329,000

Source: BLM GIS 2017

[1] Acreages are rounded to the nearest thousand for ease of interpretation

F.1.6 Ecological Benchmarks (BENCHMARK)

SUITABILITY RETENTION: Hydrologic connectivity, size, and intactness

Cumulative discretionarily land use authorizations would be inventoried in relation to the benchmark area. Discretionary land uses may not be authorized in BLM-managed watersheds within benchmarks if they would result in any of the following:

- Temporarily or permanently disrupt hydrologic connectivity in any watershed such that the next higher and lower order watersheds would be disconnected from each other because of the proposed action.
- Reduce the size of the total suitable benchmark area below the minimum dynamic reserve size.
- Temporarily or permanently reduce intactness below 80 percent in any watershed that contributes to the makeup of a benchmark area. All disturbed areas that are not fully reclaimed and deemed complete in accordance with the standards in **Appendix K**, Reclamation Standards for All Surface-Disturbing Activities, of the RMP/EIS would be counted against watershed intactness.

SUITABILITY RETENTION: Ecological representation Key ecological traits that contribute to benchmark suitability—land cover, lake edge density, climate moisture index, and gross primary productivity would be monitored by measuring them once every 3 years. If a downward trend in any one or more of the four traits is detected between two measurements, then monitoring would change to an annual schedule. If a downward trend in any one or more of the four traits is detected in three sequential measurements, then an analysis would be conducted to determine the causal factors. If the cause is determined to be partially or wholly attributable to BLM-authorized activities, then authorizing of new discretionary activities may cease or require further analysis; moreover, all practicable relevant mitigation would be applied to nondiscretionary activities until the trend reverses for three sequential measurements.

F.2 ECOLOGICAL BENCHMARKS IDENTIFICATION

The BLM used the BEACONs conservation matrix model to identify areas that currently have characteristics making them suitable as ecological benchmarks for the eight ecoregions in the planning area. These are areas that currently meet criteria that make them suitable as ecological benchmarks for the eight ecoregions in the planning area.

These characteristics are as follows:

- Hydrologic connectivity
- Size, relative to the minimum dynamic reserve
- Intactness (80 percent or greater)
- Representation of key ecological traits (land cover, lake edge density, climate moisture index, and gross primary productivity)

These characteristics are important for maintaining ecological resilience and landscape connectivity (BEACONS 2017). Within an adaptive management framework, benchmark areas serve as reference areas or controls for detecting and understanding the influence of human activity on ecological systems. They can support identification of management practices that sustain the many environmental, cultural, and economic values associated with the northwest boreal region and help to manage risk (Kachergis et al. 2020).

In this manner, the BLM can use adaptive management to evaluate the effects of authorized activities by using monitoring tools. One example is using the BLM Assessment, Inventory, and Monitoring indicators

(MacKinnon et al. 2011; Taylor et al. 2014; BLM 2015) to compare effects of varying use levels and mitigation measures applied to authorized activities inside and outside the benchmarks. The BEACONS geographic information system products and techniques also can be used as a tool to identify areas with minimal conflict between maintaining ecological integrity and connectivity and potential development authorizing scenarios.

The Central Yukon RMP interdisciplinary team refined the BEACONS outputs into manageable options to be carried forward in the Approved RMP/ROD using the following process:

- **Excluding ecoregions.** The BLM originally included eight ecoregions in the BEACONS analysis. Four of these were excluded from further consideration because they either overlapped little with the planning area, or they did not have many acres of federal land within their boundaries. The remaining four ecoregions were retained to plan for resilience as part of the Central Yukon RMP/EIS planning process.

Retained Ecoregions	Eliminated Ecoregions
Kobuk Ridges and Valleys	Alaska Range
Ray Mountains	Lime Hills
Yukon River Lowlands	Nulato Hills
Kuskokwim Mountains	Tanana Kuskokwim Lowlands

- **Refining list of potential benchmarks.** The model output created over 100 candidate benchmarks for each ecoregion. Analyzing the feasibility of managing each of these benchmarks would be prohibitively time intensive. The interdisciplinary team refined the list of benchmarks to be considered by restricting consideration to the top-ranked 12 or 13 benchmarks. The team ranked benchmarks using three criteria fundamental benchmark properties; resilience to climate change; and the amount of priority species habitat. An overall rank was obtained for each of the 100-plus benchmarks. The interdisciplinary team did not consider benchmarks ranked lower than 13.
- **Selecting benchmark polygons.** Using the list of top-ranked benchmarks for each ecoregion, the interdisciplinary team proposed two sets of benchmarks: those with the most BLM-managed land and those with the most CSU land.
    - **Select BEACONS benchmark from 13 top-ranked benchmarks with the greatest amount of BLM-managed land** (see **Map F-1**, BEACONS Benchmarks). The goal would be to maintain the characteristics that make these areas suitable as ecological benchmarks. This allows the BLM to establish quantitative planning objectives; monitor the effectiveness of management decisions in meeting those objectives; and use that information to inform adaptive management strategies. The experimental control areas would lie mostly on BLM-managed lands, including approximately 4,622,000 acres of Central Yukon Field Office lands.

F.3 CONNECTIVITY CORRIDORS

The use of corridors to connect core conservation areas is generally found in developed areas with highly fragmented ecosystems; however, there are also application examples in areas where opportunities exist for proactively conserving largely intact systems (Bennett and Mulongoy 2006), such as the landscapes of interior Alaska. The biodiversity benefits of such connectivity corridors can spill over into surrounding nontarget areas (Brudvig et al. 2009), extending the value of connectivity corridors beyond simply connecting core areas.

Classification of the habitat value is not just a question of habitat presence or absence. Areas fragmented by human use can still have considerable habitat value (McIntyre and Hobbes 1999). Because of this, management objectives in the matrix surrounding core conservation areas appropriately include recognition of ecological values and contributions to conservation across the landscape. This includes lands managed for multiple uses.

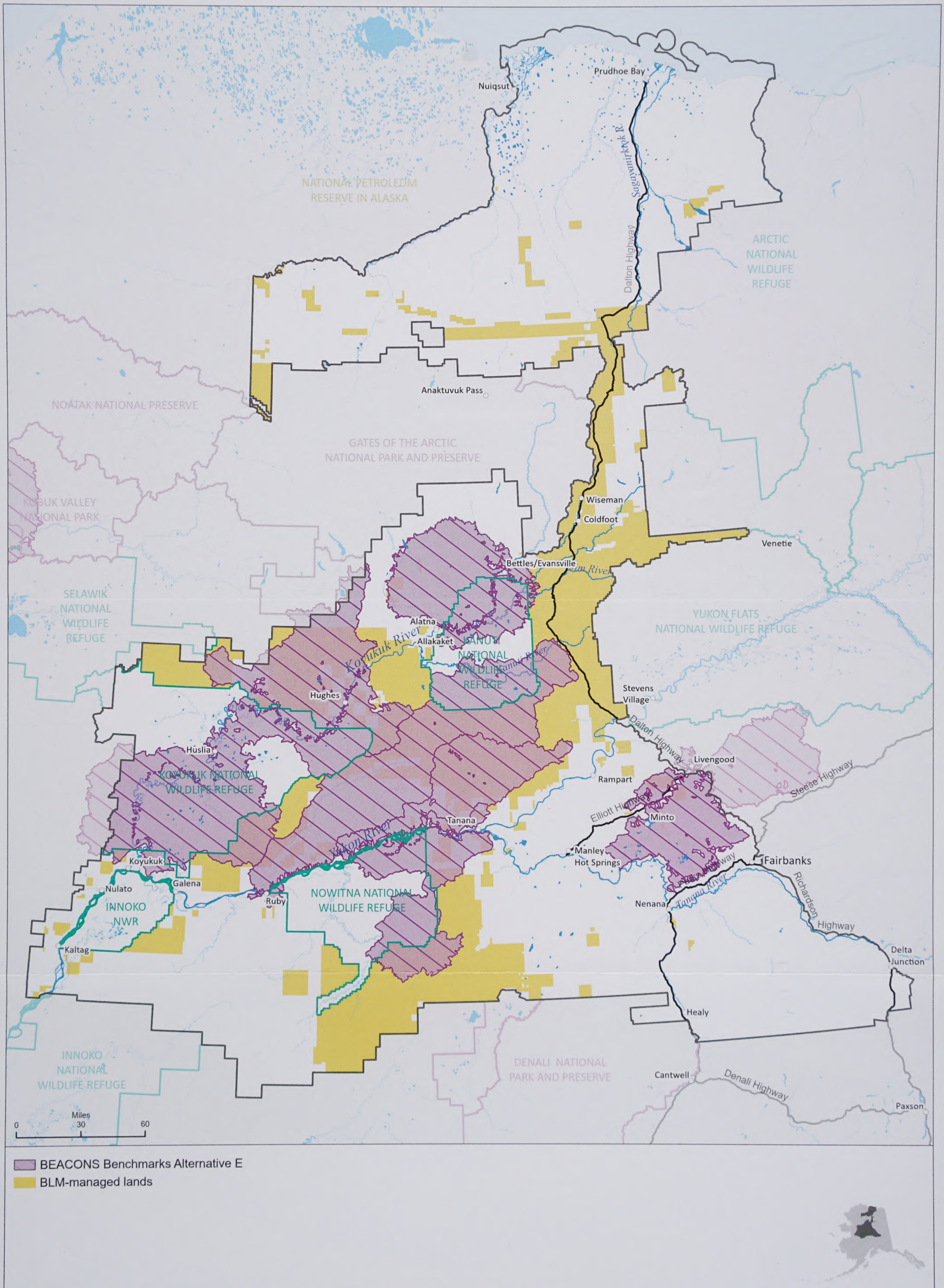
The combined benefits of connecting core conservation areas and extending conservation benefits into the matrix make connectivity corridors important for achieving landscape conservation goals on lands managed for multiple uses.

It is important to recognize that landscape connectivity corridors are landscape management features, not wildlife management features. The intent is not to capture currently used migration corridors, but to sustain resilience and capacity for adaptability in response to change.

The structural connectivity corridors proposed in the Central Yukon Approved RMP are based on enduring landscape features, which are not directly influenced by most management actions. However, given the recognition of least-cost pathways through the landscape, it follows that corresponding wildlife habitat connectivity is a functional requirement; thus, management actions focus on retaining general habitat connectivity, minimizing habitat fragmentation or loss, and avoiding barriers to wildlife movement within those corridors. See **Map F-2**, Alternative E: Connectivity Corridors. Connectivity corridors encompass 371,000 acres of BLM-managed lands.

This page intentionally left blank.

BEACONS Benchmarks


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
NATIONAL PETROLEUM RESERVE IN ALASKA
Dalton Highway
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
Rampart
Steese Highway
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Tanana River
Richardson Highway
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

▨ BEACONS Benchmarks Alternative E

🟨 BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

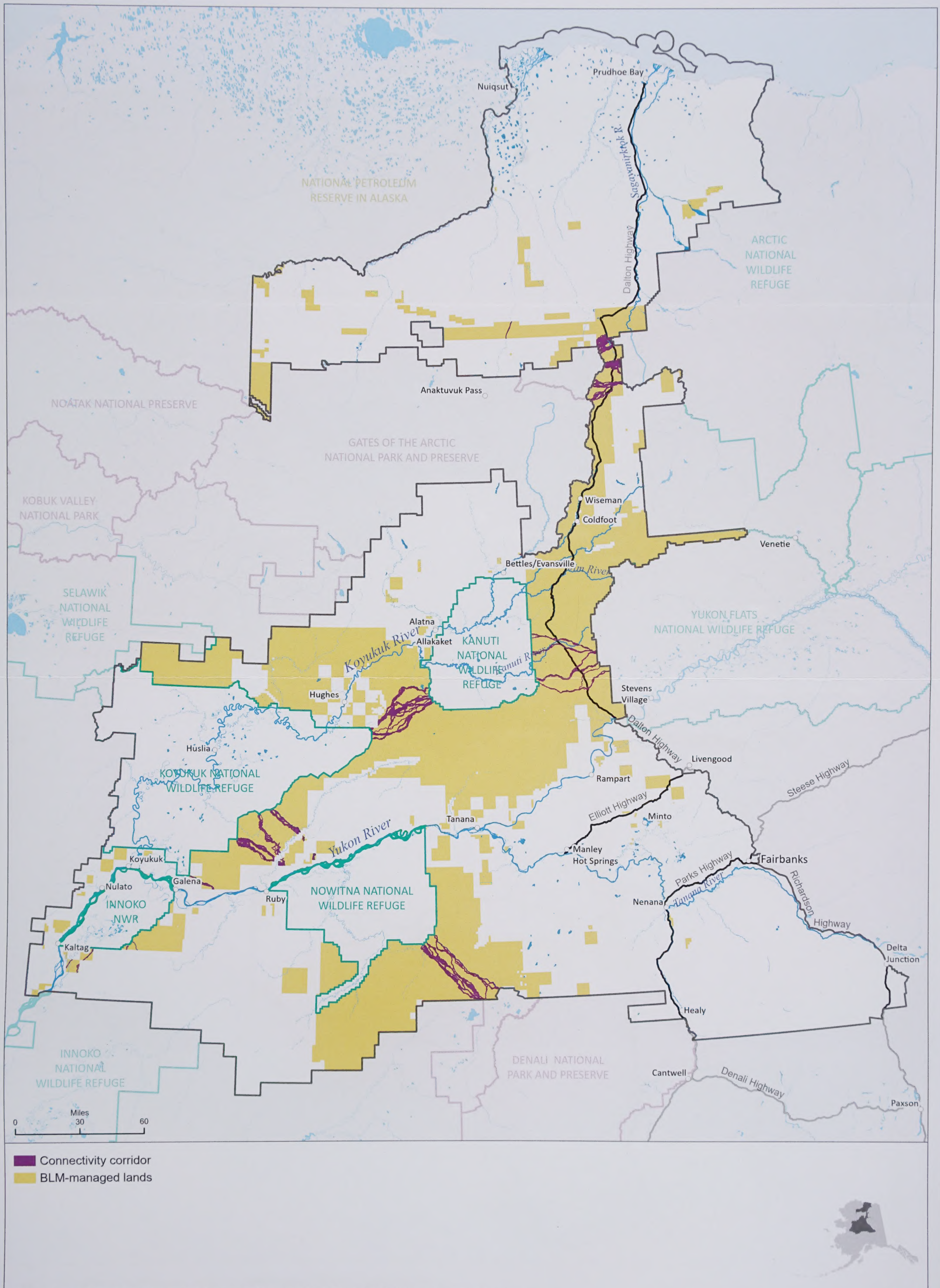
Data Source: BLM GIS 2017

Map F-1

Print Date: 11/07/2024

Alternative E: Connectivity Corridors

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Nenana
Richardson Highway
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

🟪 Connectivity corridor
🟨 BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map F-2

Print Date: 11/07/2024

F.4 REFERENCES

BEACONS. 2017. Conservation Matrix Model. Internet website: https://beaconsproject.ualberta.ca/.

Beever, E.A., J. O'Leary, C. Mengelt, J.M. West, S. Julius, N. Green, D. Magness, et al. 2015. Improving conservation outcomes with a new paradigm for understanding species' fundamental and realized adaptive capacity. Conservation Letters 9(2): 131–137.

BLM (U.S. Department of the Interior Bureau of Land Management). 1994. Ecosystem Management in the BLM: From Concept to Commitment. U.S. Department of the Interior, Bureau of Land Management Publication number BLM/SC/GI-94/005+1736, January 1994.

_____. 2015. AIM National Aquatic Monitoring Framework: Introducing the Framework and Indicators for Lotic Systems. Technical Reference 1735-1. U.S. Department of the Interior, Bureau of Land Management, National Operations Center, Denver, Colorado.

BLM GIS (U.S. Bureau of Land Management Geographic Information Systems). 2017. GIS data used in the Central Yukon RMP alternatives, affected environment, and impact analysis. Last edit date: March 2024. Fairbanks, Alaska.

Brost, Brian. 2010. Use of Land Facets to Design Conservation Corridors: Conserving the Arenas, Not the Actors. Master's Thesis. Northern Arizona University, Flagstaff, Arizona.

Brudvig, L.A., E.I. Damschen, J.J. Tewksbury, N.M. Haddad, and D.J. Levey. 2009. Landscape connectivity promotes plant biodiversity spillover into non-target habitats. PNAS, 106(23): 9328–9332.

Bennett, G. and K.J. Mulongoy. 2006. Review of Experience with Ecological Networks, Corridors and Buffer Zones. Secretariat of the Convention on Biological Diversity, Montreal, Technical Series No. 23.

Cooke, Hilary A. 2017. Securing a Wild Future: Planning for Landscape-Scale Conservation of Yukon's Boreal Mountains. Wildlife Conservation Society Canada Conservation Report No. 9. Toronto, Ontario, Canada.

Heller, N.E. and E.S. Zavaleta. 2009. Biodiversity management in the face of climate change: A review of 22 years of recommendations. Biological Conservation 142(1): 14–32.

Hinzman, Larry D., Leslie A. Viereck, Phyllis C. Adams, Vladimir E. Romanovsky, and Kenji Yoshikawa. 2006. "Climate and Permafrost Dynamics of the Alaskan Boreal Forest." In: Alaska's Changing Boreal Forest (Stuart F. Chapin, Mark W. Oswood, Keith van Cleve, Leslie A. Viereck, and David L. Verbyla, editors). New York, New York: Oxford University Press, 39–61.

IPCC (Intergovernmental Panel on Climate Change). 2014. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (V.R. Barros, C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, et al., editors). Cambridge University Press, Cambridge, United Kingdom and New York, New York, USA. 688 p.

Jenness, J., B. Brost, and P. Beier. 2011. "Land Facet Corridor Designer: Extension for ArcGIS." Jenness Enterprises, no. Computer Program. Internet website: http://www.jennessent.com/arcgis/land_facets.htm.

Kachergis, E., N. Lepak, M. Karl, S. Miller, and Z. Davidson. 2020. Guide to Using AIM and LMF Data in Land Health Evaluations and Authorizations of Permitted Uses. Tech Note 453. U.S. Department of the Interior, Bureau of Land Management, National Operations Center, Denver, CO.

Kaisischke, Eric S., T. Scott Rupp, and David L. Verbyla. 2006. "Fire Trends in the Alaskan Boreal Forest." In: Alaska's Changing Boreal Forest (Stuart F. Chapin, Mark W. Oswood, Keith van Cleve, Leslie A. Viereck, and David L. Verbyla, editors). Oxford University Press, New York, New York. Pp 285–301.

MacKinnon, W.C., J.W. Karl, G.R. Toevs, J.J. Taylor, M. Karl, C.S. Spurrier, and J.E. Herrick. 2011. BLM core terrestrial indicators and methods. Tech Note 440. U.S. Department of the Interior, Bureau of Land Management, National Operations Center, Denver, Colorado.

Magness, D.R., A.L. Sesser, and T. Hammond. 2018. Using topographic geodiversity to connect conservation lands in the Central Yukon, Alaska. Landscape Ecology, 33: 547–56.

McIntyre, S. and R. Hobbes. 1999. A framework for conceptualizing human effects on landscapes and its relevance to management and research models. Conservation Biology, 13(6): 1282–1292.

Taylor, J.J., E.J. Kachergis, G.R. Toevs, J.W. Karl, M.R. Bobo, M. Karl, S. Miller, et al. 2014. AIM-Monitoring: A Component of the BLM Assessment, Inventory, and Monitoring Strategy. Technical Note 445. U.S. Department of the Interior, Bureau of Land Management, National Operations Center, Denver, Colorado.

Thoman, R. and J.E. Walsh. 2019. Alaska's changing environment: Documenting Alaska's physical and biological changes through observations (H.R. McFarland, editor). International Arctic Research Center, University of Alaska Fairbanks.

Appendix G

Aquatic and Riparian Resource Desired Conditions and Objectives

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX G. AQUATIC AND RIPARIAN RESOURCE DESIRED CONDITIONS AND OBJECTIVES G-1
G.1 Aquatic and Hydrology Definitions G-1
G.2 Watershed Aquatic Resource Value Model G-3
G.3 Watershed Condition Model G-4
G.4 Desired Conditions and Objectives G-7
G.5 Rationale G-8
G.6 References G-17

TABLES

Page

G-1 Rank Criteria and Scoring Used to Identify Aquatic Resource Values G-4
G-2 Attributes and Scoring Used to Identify Watershed Condition G-5
G-3 Aquatic and Riparian Resource Desired Conditions and Objectives G-8

MAPS

Page

G-1 Aquatic Resources G-19
G-2 Sensitive Soils: Permafrost G-20
G-3 Watershed Condition G-21

ACRONYMS AND ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS	Full Phrase
AIM	Assessment, Inventory, and Monitoring
BLM	Bureau of Land Management
GIS	geographic information system
HUC	hydrologic unit code
PNC	potential natural conditions
RMP	resource management plan

Appendix G. Aquatic and Riparian Resource Desired Conditions and Objectives

G.1 AQUATIC AND HYDROLOGY DEFINITIONS

100-year floodplain. The area inundated by the 100-year flood or the 1 percent annual exceedance probability flood. It is the flood that has a 1 percent chance of being equaled or exceeded in any single year. It is often mistakenly thought of as the flood that occurs once every 100 years; in actuality, if a project within the 100-year floodplain is expected to last 30 years, it would have a 25 percent chance of experiencing flood damage due to a 100-year flood; for a project with an anticipated life of 15 years, the chance of incurring flood damage would be 14 percent. Annual precipitation is increasing in the planning area, so the probability of 100-year floods may increase (Thoman and Walsh 2019).

The 100-year floodplain is difficult to accurately map without extensive ground surveys. On-the-ground surveys conducted in the Central Yukon planning area typically employ the valley width that corresponds to an elevation of three times maximum bankfull depth as an estimate of the 100-year floodplain (FEMA 2015).

Given the difficulty of remotely mapping the 100-year floodplain, riparian buffer distances are used in this resource management plan (RMP) as proxies for the 100-year floodplain. Buffer distances are given as a distance from bankfull elevation and are dependent on stream order as follows:

Stream Order	Buffer Distance (Feet)
First and second	100
Third	500
Fourth and fifth	1,000
Sixth through eighth	1,500

alevins. Newly spawned salmon or trout still carrying the yolk.

aggradation. A raising of the local base level of a stream due to sediment deposition.

anadromous. Fish that live most of their lives in the sea but return to freshwater to spawn. Anadromous streams are those that support fish species that migrate between freshwater and marine waters, such as salmon.

Bank Erosion Hazard Index. Evaluates the susceptibility to erosion for multiple erosional processes, such as surface erosion, fluvial entrainment, or mass erosion. The Bank Erosion Hazard Index uses a variety of variables (Rosgen 2008) and can be used to establish corresponding streambank erosion rates (Rosgen 2006).

bank-to-height ratio. A quantitative measure of the degree of vertical containment or degree of channel incision, as determined by the ratio of the lowest bank height, divided by the maximum bankfull depth.

bankfull depth (maximum). Maximum depth of the bankfull channel cross-section or the distance between the thalweg[1] and bankfull stage.

---

[1] Line connecting the lowest points of successive cross-sections along the course of a valley or river.

bankfull depth (mean). The mean depth of flow at the bankfull stage, determined as the cross-sectional area, divided by the bankfull surface width.

bankfull discharge. A frequently occurring peak flow whose stage represents the incipient point of flooding. It is often associated with a return period of 1–2 years, with an average of 1.5 years. It is expressed as the momentary maximum of instantaneous peak flows, rather than the mean daily discharge.

bankfull stage. The elevation of the water surface associated with the bankfull discharge.

bankfull width. The surface width of the stream, measured at the bankfull stage.

bankfull width-to-depth ratio. An index value that indicates the shape of the stream channel cross-section (ratio of bankfull width to the mean bankfull depth).

degradation. A lowering of the local base level of a stream, due to channel incision processes.

dynamic equilibrium. A river or stream's ability in the present climate to transport the streamflows and sediment of its watershed, overtime, in such a manner that the channel maintains its dimension, pattern, and profile without either aggrading or degrading.

entrenchment ratio. The vertical containment of a river that is quantitatively defined as the width of the flood-prone area, divided by the bankfull width (the flood-prone area width is that of the channel at an elevation that is twice the maximum bankfull riffle depth).

essential fish habitat. Those waters and substrate necessary for fish for spawning, breeding, feeding, or growing to maturity; it is defined by the Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265).

flood-prone area width. The width of the channel associated with the elevation that is twice the maximum bankfull depth. It includes the floodplain of the river and often the low terrace of alluvial streams.

high-value watershed. Watersheds with the highest fisheries resource values in the Central Yukon planning area, this metric was used during the development of the Proposed Plan. The development is explained in **Section G.2** of this appendix.

hydrologic connectivity. The degree to which landscape components facilitate or impede the water-mediated transfer of matter, energy, or organisms within or between elements of the hydrologic cycle.

hydrologic cycle. Includes the fundamental components of precipitation, infiltration, runoff, and evaporation that indicate the origin of water and determines the downstream transfer of water, sediment, nutrients, and organic debris; it ultimately defines the physical and biological character of the stream.

hydrologic regime. Variations in the state and characteristics of a water body that are regularly repeated in time and space and that pass through phases, such as a season.

lentic. Wetlands or riparian areas with standing water habitat, such as lakes, ponds, seeps, bogs, and meadows.

macroinvertebrate. Bottom-dwelling species, such as crayfish and mayflies.

potential natural conditions (PNC). PNCs represent the range of chemical, physical, and biological conditions expected at a site under minimal anthropogenic impacts, but they include natural disturbances. In the case of RMP objectives and reclamation plans, the Bureau of Land Management (BLM) uses indicators of ecosystem health and percentiles to assess the attainment of management objectives. For indicators that are expected to decrease with disturbance (e.g., vegetation composition), values above the 25th percentile would be considered within PNCs. Values between the 25th and 5th percentile would be considered a moderate departure from PNCs, and values below the 5th percentile would be considered a major departure from PNCs. For indicators that are expected to increase with disturbance (e.g., the amount of bare ground, nonnative invasive plant species, and the proportion of soil surface in large intercanopy gaps), values below the 75th percentile would be considered within PNCs. Values between the 75th and 95th percentile would be considered a moderate departure from PNCs, and values above the 95th percentile would be considered a major departure from PNCs.

riparian. Relating to or situated on the banks of a river.

riparian-wetlands. A form of wetland transition between permanently saturated wetlands and upland area. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Typical riparian areas are lands along, next to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are such sites as ephemeral streams or washes without vegetation that depends on free water in the soil.

river stability (dynamic equilibrium). A river or stream's ability in the present climate to transport the streamflows and sediment of its watershed over time, in such a manner that the channel maintains its dimension, pattern, and profile without aggrading or degrading.

Rosgen stream classification. A classification system for natural rivers in which a morphological arrangement of stream characteristics is organized into relatively similar stream types. Morphologically similar stream reaches are divided into seven major stream type categories (A–G) that differ in entrenchment, gradient, width/depth ratio, and sinuosity in various landforms (Rosgen 1994).

stream hydrograph. A chart that displays the change of a hydrologic variable over time. One of the most frequently created hydrographs shows the change in discharge of a stream over time.

site potential. The highest ecological status a riparian-wetland area can attain, given no political, social, or economic constraints; often referred to as the potential natural community.

G.2 WATERSHED AQUATIC RESOURCE VALUE MODEL

An aquatic resources value model was developed for the Central Yukon Field Office, in conjunction with this plan. It is an indicator of the value of fish resources and habitat in the planning area.

On the lands that it manages, the BLM ranked 767 watersheds, using the aquatic resources value model, after segregating the planning area into 6th level (12-digit) hydrologic units. The agency used the hydrologic unit code (HUC) system because it provides a framework that delineates watersheds using an accepted national standard hierarchical system based on surface hydrologic features. The ranking system was developed to score the fisheries values by watershed, using a combination of automated geographic information system (GIS) modeling and professional judgment.

Primary metrics that the BLM considered in ranking were fish species presence (diversity), salmon and non-salmon diadromous species[2] habitat, and the presence of unique or rare fishery resources or habitat.

---

[2] Species that migrate alternately between freshwater and salt water.

Based on the model, the highest ranked watersheds—those with the highest fisheries resource values in the planning area—were used during the development of the Approved RMP. These are referred to as high-value watersheds in the Central Yukon RMP and Environmental Impact Statement.

Aquatic resource value rankings by watershed are depicted on **Map G-1**. **Table G-1** outlines the ranking criteria and associated point system. Sensitive soils are depicted on **Map G-2**.

Table G-1
Rank Criteria and Scoring Used to Identify Aquatic Resource Values

Value	Definition	Score
Endangered Species Act aquatic resources	Federally listed aquatic species are present.	3 Points
Essential fish habitat is present	Alaska Department of Fish & Game Anadromous Waters Catalog GIS data served as the basis for determining if salmon species occur in the watershed.	2 Points
Fish species diversity	Based on reports and professional knowledge, determine the number of fish species occurring in the watershed.	1–2 Species = 1 Point 3–4 Species = 2 Points 5–6 Species = 3 Points 7–8 Species = 4 Points > 9 Species = 5 Points
Non-salmon diadromous species present	Using the Anadromous Waters Catalog GIS data, select watersheds that contain non-salmon species, such as whitefish and lamprey.	2 Points
Unique/rare fishery resource or habitat or both	Spawning areas for salmon and non-salmon diadromous species based on the Anadromous Waters Catalog GIS data (5 points) and the presence of unique/rare fisheries resources (5 points).	Potential for 10 Points

G.3 WATERSHED CONDITION MODEL

The BLM developed a watershed condition model for this plan as an indicator of habitat health in the planning area. The agency evaluated the resource condition using the model, after segregating by area and using sixth level hydrologic units, as was done for the aquatic resource value model. The process categories and attributes used in the evaluation were adapted from a Forest Service Watershed Condition Classification Technical Guide (Potyondy and Geier 2011). The four process categories are the aquatic physical, aquatic biological, terrestrial physical, and the terrestrial biological. Each process category was evaluated using a defined set of attributes (**Table G-2**). Modifications and additional attributes were formulated by the BLM-Alaska fisheries staff, working closely with GIS staff. Watershed condition rankings are depicted on **Map G-3**.

The model is used to establish the current watershed condition and the predicted trend for the impacts analysis (Chapter 3 of the Central Yukon RMP/Environmental Impact Statement). The results also quantify the number of watersheds needing additional management attention to achieve the desired conditions.

Table G-2
Attributes and Scoring Used to Identify Watershed Condition

Weighting	Attribute	Definition	Scoring
Aquatic Physical (Weighting = 30 Percent)	Impaired waters (303[d])	Alaska Department of Environmental Concern Impaired Waters GIS data was used to determine if Clean Water Act Section 303(d)-listed streams were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Not formally listed water quality problems	Reports and professional knowledge were used to determine if other water quality problems were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Flow characteristics	National Hydrography Dataset Point and Flow line GIS data was used to determine if reservoirs, dams, or diversion facilities were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Habitat fragmentation	Reports and professional knowledge were used to determine if habitat fragmentation was occurring.	If aquatic habitat fragmentation areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Large woody debris	Reports and professional knowledge were used to determine if large woody debris is present and continues to be recruited into the system at near natural rates.	If areas are in the 6th level HUC, where large woody debris is present but is recruited into the system at less than natural rates because of riparian management, the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Channel shape and function	Reports and professional knowledge were used to determine if stream channel shape and function exhibit the range of conditions expected in the absence of human influence.	If areas are in the 6th level HUC, where streams exhibit a channel shape and function outside the range of conditions expected, the watershed receives 3 points; otherwise, 1 point is awarded.

Weighting	Attribute	Definition	Scoring
Aquatic Physical (Weighting = 30 Percent)	Lentic system functionality	Reports and professional knowledge were used to determine if physical alteration from the natural condition of lentic bank/shore integrity, vegetation community, soil structure, or hydrology were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Life form presence	Reports and professional knowledge were used to determine if expected aquatic life forms and communities are present, based on the potential natural communities present, or some life histories have been lost, or range has been reduced in the watershed due to human disturbance of habitat.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Native species	Alaska Exotic Plants Information Clearinghouse GIS data was used to determine if nonnative species are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Aquatic invasive plant species	Alaska Department of Environmental Concern GIS data was used to determine if aquatic nonnative species are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Vegetation condition	Reports and professional knowledge were used to determine if native vegetation is functioning properly throughout the stream corridor or along wetlands and water bodies.	If areas are in the 6th level HUC, where native vegetation is found to be nonfunctioning, then the watershed receives 3 points; otherwise, 1 point is awarded.
Terrestrial Physical (Weighting = 30 Percent)	Road and trail maintenance	Road, Revised Statute 2477, and trail GIS data were used to determine there are if roads or trails.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Terrestrial Physical (Weighting = 30 Percent)	Road's proximity to water	Road, Revised Statute 2477, and trail GIS data were used to determine if roads or trails were within 300 feet of a waterbody.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.

Weighting	Attribute	Definition	Scoring
Terrestrial Physical (Weighting = 30 Percent)	Soil productivity/erosion	GIS data on roads, Revised Statute 2477, and trails buffered by 35 feet were used to determine the effect of roads and trails on soil productivity and erosion.	The buffered area in each watershed is divided by the total acres of the watershed. A value of 1 is assigned when buffered routes do not fall within a watershed; a value of 2 is assigned when the acreage of buffered routes is greater than 0 and less than 1; a value of 3 is assigned when the acreage of buffered routes is greater than or equal to 1.
Terrestrial Physical (Weighting = 30 Percent)	Soil contamination	Alaska Department of Environmental Concern contaminated sites GIS data were used to determine if contaminated sites are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Terrestrial Biological (Weighting = 10%)	Terrestrial invasive species	Alaska Exotic Plants Information Clearinghouse GIS data were used to determine if terrestrial nonnative plants are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.

Watershed Condition Model Summary Calculation:

> ((([Impaired_Waters] + [Water_Quality_Problems] + [Flow_Characteristics] + [Habitat_Fragmentation] + [Large_Woody_Debris] + [Channel_Shape_Function] + [Lentic_System_Functionality])/7)*.3) + ((([Life_Form_Presence] + [Native_Species] + [Aquatic_Invasive] + [Vegetation_Condition])/4)*.3) + ((([Road_Trail_Maint] + [Proximity_Water] + [Soil_Productivity_Erosion] + [Soil_Contamination])/4)*.3) + ((([Terrestrial_Invasive_Species])/1)*.1)

Watershed Ranking:

Watershed Condition Model Summary is equal to 1.0: functioning properly
Watershed Condition Model Summary is greater than 1.0–2.0: functioning at risk
Watershed Condition Model Summary is greater than 2.0: impaired function

G.4 DESIRED CONDITIONS AND OBJECTIVES

There is a goal of no net loss of aquatic habitat function. Reclamation standards should be applied, and resource conditions should be monitored for floodplains and riparian and aquatic resources with the application of standard operating procedures for all development activities.

See **Table G-3** for desired conditions and thresholds.

G.5 RATIONALE

Table G-3
Aquatic and Riparian Resource Desired Conditions and Objectives

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Watersheds are managed so as to maintain the integrated ecological functions of rivers, streams, wetlands, and lakes and their associated riparian areas. They are also managed to provide, into perpetuity, the ecosystem services associated with properly functioning aquatic and riparian habitat: biological diversity, recreation, aesthetics, soil productivity, water quality, food, and raw materials.	N/A	N/A	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Riparian zones are fully functional over the width of the 100-year floodplain.	Riparian PFC or AIM-based PNC	Determine the need for floodplain disturbance; outline required eight-step evaluation (see FEMA 2015).	Before the project is authorized, the proponent must demonstrate why the 100-year floodplain cannot be avoided; if so, the proponent should describe the methods used to minimize disturbance, such as excavating and storing riparian vegetation, to maintain vigorous conditions for replanting following the project. The proponent should use methods to protect floodplain function; examples are project sequencing, to minimize disturbance and make efficient use of riparian vegetation for immediate replanting; planning riparian leave strips for source vegetation; and striving to restore floodplain function within 3 years following project completion.

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Riparian zones are fully functional over the width of the 100-year floodplain.	Riparian-wetland AIM, lotic AIM, or other appropriate methods.	The following would be attained within 3 years of project completion: riparian-wetland spatial extent, vegetation density, dominant woody vegetation composition, age-class distribution, and canopy cover equivalent to the site potential.[3] This would be an interim objective until regional reference conditions are quantified; at that time, the objective would be greater than the 25th percentile of the regional reference condition of the regional reference condition based on lotic and/or riparian-wetland AIM data or other regional reference data The riparian-wetland area would have a functional rating as determined through riparian-wetland AIM, lotic AIM, or other appropriate methods.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain connectivity (lateral)	Maintain a bank-to-height ratio less than the 75th percentile of reference conditions (PNC) (1.0:1.0 if new construction).	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain width	No loss of the 100-year floodplain width.	N/A

---

[3] The highest ecological status a riparian-wetland area can attain, given no political, social, or economic constraints; often referred to as the potential natural community.

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Stream channel maintenance flows	Prioritize applying for several instream flow reservations over the life of the plan; this is to protect channel maintenance flows and provide for habitat needs of fish in high value HUCs.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain connectivity (longitudinal)	Longitudinal connectivity: Streams and stream segments must remain connected and accessible to all species and life stages, as dictated by natural stream potential.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Bed form diversity	As soon as the disturbance activity is done and for 5 years following reclamation, thresholds considered to be functioning will be based on regional reference reach conditions (25th to 75th percentile). They will address percent pool, pool-to-pool spacing ratio (see Harman et al. 2023 for interim threshold values; final values to be provided on completion of the AIM regional reference condition and other regional reference data).	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Stream channel design	Stream diversions, bypasses, stream relocation, or stream reconstruction projects will be designed to achieve stable channel form, floodplain connectivity, bedform diversity, and riparian vegetation within PNC, using regional reference datasets or stream design datasets.	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Erosion	Erosion is managed so as to have no apparent rills, gullies, trail braiding, or other indicators of degradation.	N/A
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	Soil depth following disturbance will replicate pre-disturbance depth, so as to not restrict root growth or result in moisture extremes.	For reclaimed sites, soil amendments to adjust pH, to provide nutrients, and to increase soil microbial activity will be dictated by the results of a soil analysis.
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	Abnormal hydrologic heaving, slumping, or thawing of permafrost is not occurring.	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	The threshold for impairment to soil fertility, nutrient cycling, and hydrologic cycling processes will be less than 0.5 percent of any 6th level HUC.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	N/A	Rosgen geomorphic channel design or other appropriate restoration planning methods will be used to develop an appropriate channel geometry and slope for the anticipated discharge and sediment regime. Designs will be required prior to disturbance and will be implemented as soon as the disturbance is over; it will be monitored and maintained for 5 years following reclamation.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Lateral channel stability (streambank stability)	As soon as the disturbance is over and for 5 years following reclamation, stream design results in laterally stable stream banks as indicated by PNC values for Stream Bank Cover and Stability derived from regional reference condition. Interim values would use Bank Erosion Hazard Index/Near Bank Stress ratings within the functional range as presented in Table 8.7 of Harman et al. 2012.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Stream competency and stream power	Bed material is sized or stream channel is designed to prevent aggradation or degradation of stream channel (channel at dynamic equilibrium).	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Stream dynamics	Multi-metric bioassessment index values for benthic macroinvertebrate will be managed for functional conditions as outlined in the AK Stream Quantification Tool (Alaska Stream Quantification Tool Steering Committee 2021) or regionally adapted multi-metric bioassessment indices.	To the extent possible, avoid modifying high sediment supply stream channels and streambanks of Rosgen channel type (Rosgen1996; pp. 8, 9): A-3 through A-6, C-4 through C6; D-type, F-3 through F6; G3 through G6.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Road density	Manage roads and access trails so as to avoid the 100-year floodplain; road density will be 0.1 mile per square mile or less in the watershed area (6th level HUC).	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Water quality	Meet federal and state water quality laws.	On Clean Water Act, Section 303(d)-listed streams, once a total maximum daily load is established, the BLM would authorize no additional disturbance until the proponent can demonstrate that further disturbance would be in compliance with water quality standards established in the total maximum daily load.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Water quality	Meet federal and state water quality laws.	Must meet Alaska water quality antidegradation law. For all surface-disturbing activities requiring an erosion control plan, address the parameters commonly required in Alaska stormwater pollution prevention plans.

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Water quality	Meet federal and state water quality laws.	As a means to address nonpoint source erosion, the BLM would encourage vegetation non-disturbance zones next to lotic and lentic[4] surface waters and may be applied toward compensatory mitigation to offset functional loss, where disturbance cannot be avoided.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Water quality	Meet federal and state water quality laws.	Suction dredging would be limited to the active channel, so streambanks would not be disturbed; instream use of heavy equipment to move substrate would not be allowed.
Watersheds are managed to create and sustain functional terrestrial, riparian, aquatic, and wetland habitats capable of supporting diverse populations of native aquatic- and riparian-dependent species and to be resilient and able to recover rapidly to a minimum of level 4 stream functional condition.	Vertical channel stability	Channels are vertically stable; maintain appropriate entrenchment ratios, based on the channel type and landscape setting.	N/A
	Large woody debris	In aquatic and riparian systems that evolved with wood near the streams, large woody debris is present and continues to be recruited into the system at site potential rates as evidenced by conditions occurring within the range of PNC based on regional reference conditions.	N/A
Natural disturbance regimes remain the primary drivers of shifting patterns of species composition and structure in and between watersheds. Stream channel morphology, structure, complexity, and diversity are in ranges that	Large woody debris	A goal of no net loss of aquatic habitat function with high value watersheds. Apply reclamation standards and monitoring for resource conditions in floodplain, riparian, and aquatic resources and apply standard operating procedures for all development activities.	N/A

---

[4] Fast-moving and slow-moving

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
are characteristic of the magnitude, timing, and duration exhibited by stream hydrographs under natural conditions.	Stream discharge	Watershed has free-flowing rivers and streams, or dams and diversions are operated to mimic natural hydrographs.	N/A
Retain native community composition of riparian plant and fish species at site potential.	Community composition	Over the life of the plan, conduct systematic surveys of priority restoration watersheds to establish reference condition datasets necessary to support future restoration efforts.	N/A
Watersheds managed to prevent the introduction of invasive species.	Invasive species	Aquatic invasive species are controlled using methods demonstrated to be safe for soil, water, and native aquatic resources.	Following documented occurrence of invasive plant species on the currently deployed nonnative invasive species list for management, or aquatic invasive species, develop a plan for eradication or control as soon as practicable.

G.6 REFERENCES

Alaska Stream Quant Tool Steering Committee (Steering Committee). 2021. Stream Quantification Tool and Debit Calculator for the Alaskan Interior User Manual and Spreadsheets. Version 1.0. Salcha-Delta Soil and Water Conservation District, Delta Junction, AK.

FEMA (Federal Emergency Management Agency). 2015. Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input. Department of Homeland Security. Internet website: https://www.fema.gov/media-library-data/1444319451483-f7096df2da6db2adfb37a1595a9a5d36/FINAL-Implementing-Guidelines-for-EO11988-13690_08Oct15_508.pdf.

Harman, W., R. Starr, M. Carter, K. Tweedy, M. Clemmons, K. Suggs, and C. Miller. 2012. A Function-Based Framework for Stream Assessment and Restoration Projects. U.S. Environmental Protection Agency, Office of Wetlands, Oceans, and Watersheds, Washington, DC. EPA 843-K-12-006.

Harman, W., M. Varner, E. Lamb, and D. McLeod. 2023. Stream Design and Reclamation Guide for Interior Alaska. Bureau of Land Management. BLM Technical Report 65.

Potyondy, J.P. and T.W. Geier. 2011. Watershed condition classification technical guide. FS-978. Forest Service. Internet website: https://www.fs.fed.us/biology/resources/pubs/watershed/maps/watershed_classification_guide2011FS978.pdf.

Rosgen, D. 1994. A classification of natural rivers. Catena 22 (3): 169–199.

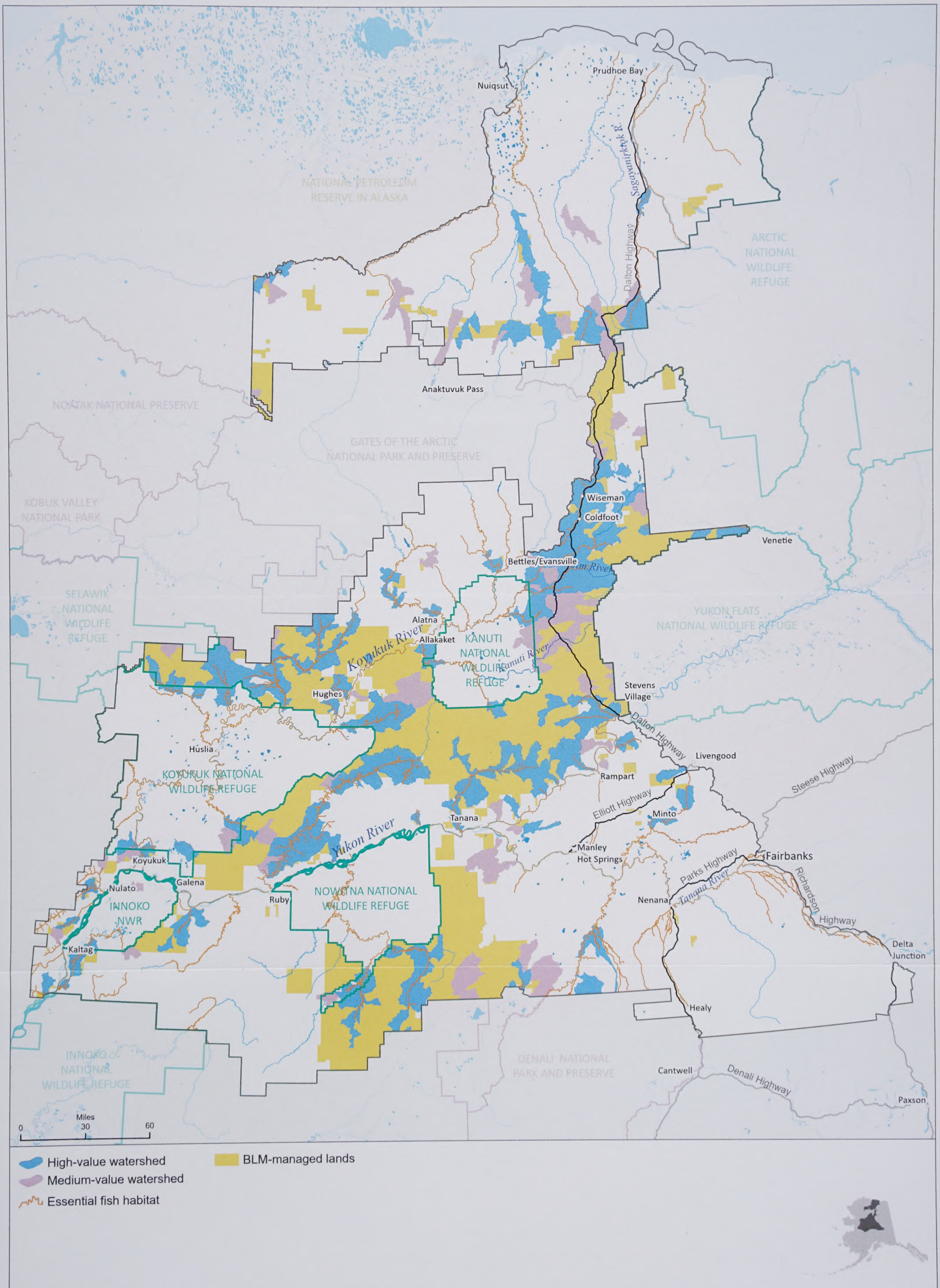
Rosgen, D. 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, Colorado.

_____. 2006. Watershed Assessment of River Stability and Sediment Supply (WARSSS). Wildland Hydrology, Fort Collins, Colorado.

_____. 2008. River Stability Field Guide. Wildland Hydrology, Fort Collins, Colorado.

Thoman, R. and J.E. Walsh. 2019. Alaska's changing environment: Documenting Alaska's physical and biological changes through observations (H.R. McFarland, editor). International Arctic Research Center, University of Alaska Fairbanks.

This page intentionally left blank.


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Tanana River
Richardson Highway
Nulato
Galena
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
High-value watershed
Medium-value watershed
Essential fish habitat
BLM-managed lands

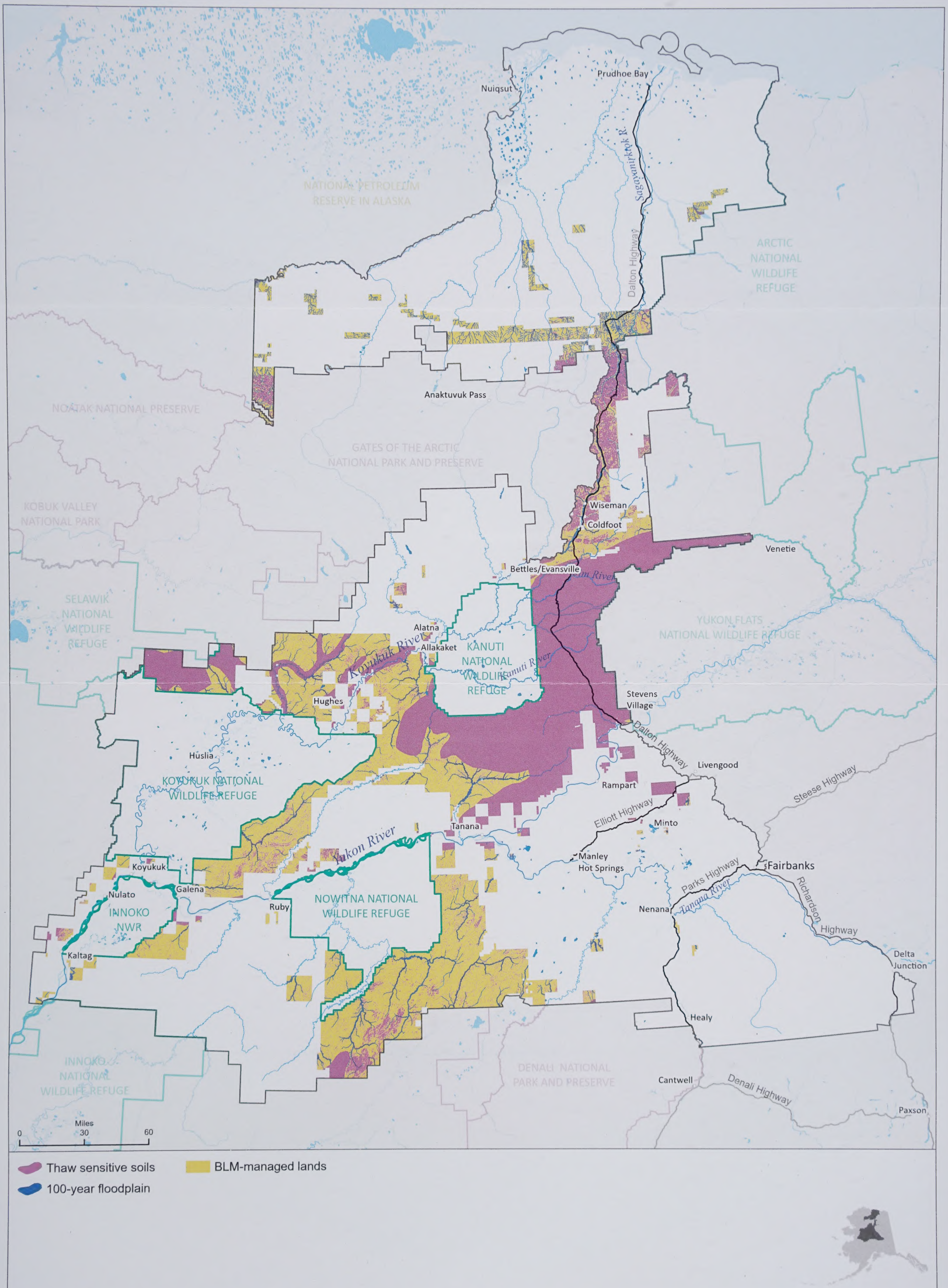
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map G-1

Print Date: 11/07/2024

Sensitive Soils: Permafrost


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Parks Highway
Richardson Highway
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Tanana River
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
Thaw sensitive soils
BLM-managed lands
100-year floodplain

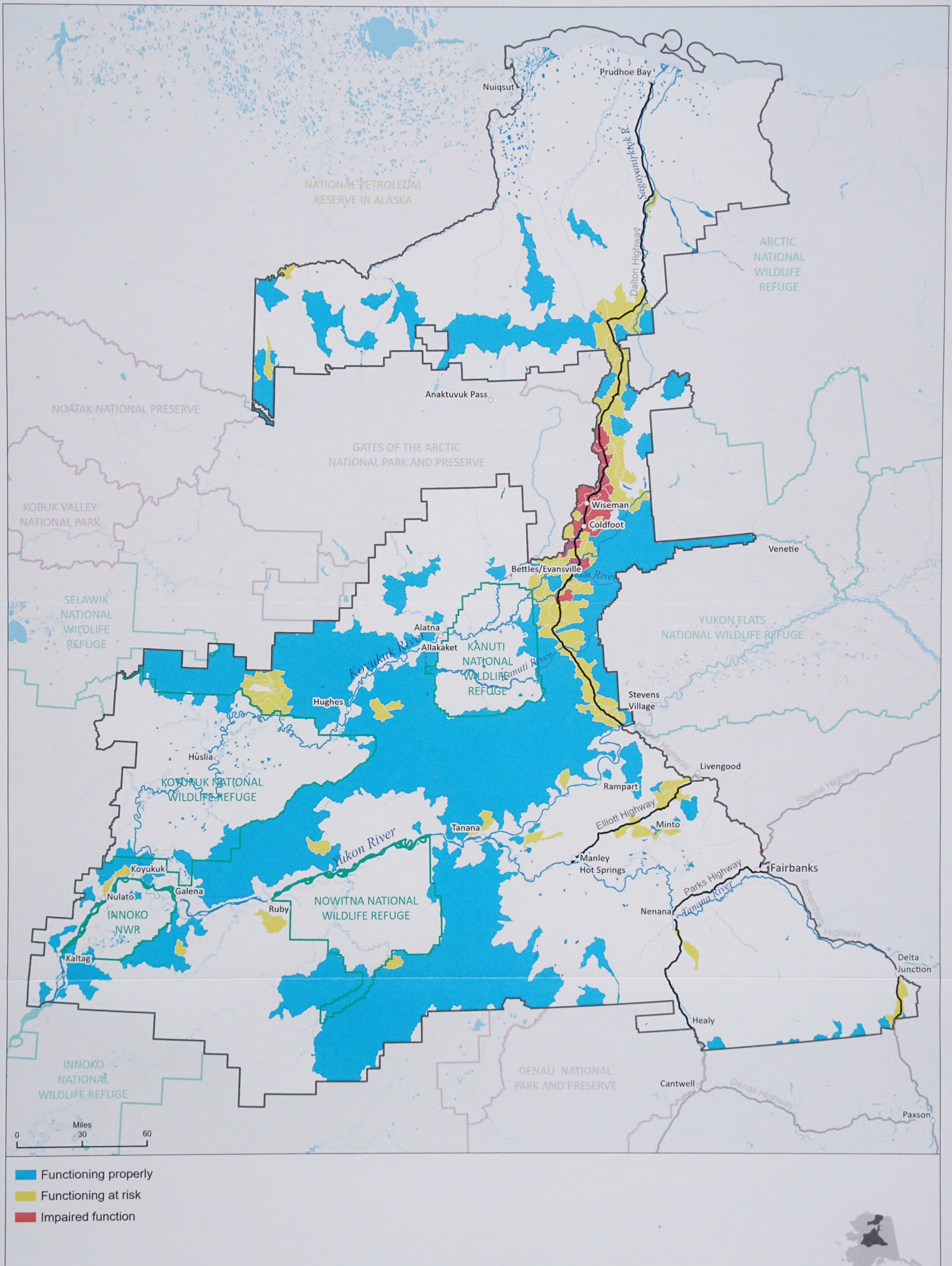
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map G-2

Print Date: 11/07/2024

Watershed Condition


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Livengood
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Elliott Highway
Steese Highway
Tanana
Minto
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Tanana River
Nenana
Richardson Highway
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
🟦 Functioning properly
🟨 Functioning at risk
🟥 Impaired function

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map G-3

Print Date: 11/07/2024

Appendix H

Dall Sheep and Caribou Habitat Management

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX H. DALL SHEEP AND CARIBOU HABITAT MANAGEMENT H-1

- H.1 Dall Sheep Habitat Management H-1
  - H.1.1 Dall Sheep Habitat Management H-1
- H.2 DSHA Considerations for Implementation-Level Travel Management Planning H-2
- H.3 Core Caribou Habitat Management H-3
  - H.3.1 Galena Mountain Herd H-4
  - H.3.2 Ray Mountains Herd H-4
  - H.3.3 Hodzana Hills Herd H-4
  - H.3.4 Core Caribou Habitat Management Allocations H-5
- H.4 References H-6

MAP

Page

H-1 Dall Sheep Habitat Areas, Movement Corridors, and Study Area H-7

ACRONYMS AND ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS	Full Phrase
BLM	Bureau of Land Management
DSHA	Dall sheep habitat areas
GMH	Galena Mountain Herd
HHH	Hodzana Hills Herd
OHV	off-highway vehicle
RMH	Ray Mountains Herd
RMP	resource management plan
ROW	right-of-way

Appendix H. Dall Sheep and Caribou Habitat Management

H.1 DALL SHEEP HABITAT MANAGEMENT

H.1.1 Dall Sheep Habitat Management

The Bureau of Land Management (BLM)-managed Dalton Utility Corridor traverses prime Dall sheep habitat in the Brooks Range of Alaska. The area is famous to backcountry hunters who value the rare road-accessible sheep-hunting opportunities. In support of Secretarial Order No. 3362, which highlights the duty of federal agencies to "expand opportunities for big-game hunting by improving priority habitats" and "to increase and maintain sustainable big game populations," the BLM Central Yukon Field Office proposes to safeguard the highest priority habitat for Dall's sheep, in particular, the known naturally occurring mineral sources (licks) for Dall's sheep. These areas are referred to as Dall Sheep Priority Habitat Management Areas in **Map H-1**, Dall Sheep Habitat Areas, Movement Corridors, and Study Area.

Mineral lick identification and monitoring in the region began before highway construction and has continued with a recent effort by the BLM to quantify mineral lick chemical properties and use patterns. It is known that each mineral lick provides a unique suite of trace minerals (region-specific data available; BLM data pending publication). A single subpopulation of sheep regularly rotates to several mineral licks in each area, further indicating that no single mineral lick will meet all the nutritional needs of a given sheep or subpopulation of sheep.

There is the potential for human development in and around the mineral licks, such as placer mining in low-lying areas and communication towers on mountaintops. Without clear delineation of priority habitat, destruction of mineral licks and reduced accessibility is highly possible, with unknown but likely detrimental impacts on local sheep populations.

The Approved Resource Management Plan (RMP) identifies Dall sheep habitat in six areas of critical environmental concern where management varies with restrictions within 0.5 miles of mineral licks, closure to mineral materials sales, right-of-way (ROW) avoidance and exclusion areas, timing limitations for development activities, and travel management limitations for authorized flights.

Dall sheep habitat management under the Approved RMP proposes a tiered level of management to accommodate development in core habitat areas, with management actions scaled to the habitat area type. Management is defined as Dall sheep habitat areas (DSHAs) only. DSHAs are BLM-managed lands identified as having the highest habitat conservation value in relation to Dall sheep.

Approved RMP

Action (Effects Minimization and Mitigation Requirements)

In DSHAs, apply the management techniques below to discretionary disturbances or activities.

Best management practices

In DSHAs, while incorporating applicable best management practices, allow activity to occur. Economic considerations, such as increased costs associated with a given activity, would not necessarily mean that a best management practice be altered or rendered inapplicable.

Action (Trails and Travel Management—Aircraft Restrictions)

Flights associated with BLM-authorized activities would be conducted more than 2,000 feet above ground level over DSHAs (Côté 1996; Frid 2003; Hurley 2004) from April 15 to August 30.

No new routes would be created in DSHAs.

Action (Fluid Minerals)

No surface occupancy stipulations would apply to fluid mineral leases in DSHAs.

Action (Locatable Minerals)

In DSHAs, locatable minerals authorizations would include all practicable mitigations to minimize surface disturbance and reduce impacts on sheep habitat and sheep movement.

Action (Mineral Materials)

DSHAs would be closed to new mineral material disposal but would remain open to the expansion of existing active pits.

Action (Nonenergy Solid Leasable Minerals)

Close DSHAs to nonenergy solid mineral leasing and development.

Action (Linear and Site-Type ROWs, Permits, and Leases, Excluding Wind and Solar)

DSHAs will be avoidance areas for new linear and site type ROWs, permits, and leases.

Transmission lines would be allowed in areas where the effect on the Dall sheep population would be minimized. New transmission lines and pipelines must be buried, to the extent feasible.

If a road ROW is necessary for public safety administrative access, or required by statute, or if it is subject to valid existing rights and creates new surface disturbance, it would be constructed to minimize the effects on the Dall sheep population.

Where avoidance is not possible, the following should be implemented:

- Construct new ROWs in designated corridors as close as technically feasible to existing linear ROW infrastructure, to limit disturbance to the smallest footprint, unless using a different alignment better minimizes impacts on Dall sheep
- Apply the pertinent management for discretionary activities in DSHAs identified in *Effects Minimization and Mitigation Requirements*

H.2 DSHA CONSIDERATIONS FOR IMPLEMENTATION-LEVEL TRAVEL MANAGEMENT PLANNING

Implementation-level travel planning will be guided by the goals, objectives, and guidelines outlined in the Dall sheep section, relevant national and Alaska-specific guidance, and the following:

- A timeline to complete travel planning will be identified, prioritized, and updated annually in all relevant planning areas to accelerate data collection, route evaluation and selection, and on-the-ground implementation, including signing, monitoring, and rehabilitating.
- Among other designation criteria from 43 Code of Federal Regulations 8342.1(b), "areas and trails will be located to minimize harassment of wildlife or significant disruption of wildlife habitats."
- During subsequent travel management planning, the following requirements would apply:

  - The BLM would consult "with interested user groups, federal, state, tribe, borough, and local agencies, local landowners, and other parties in a manner that provides an opportunity for the public to express itself and have its views given consideration"; consequently, a public outreach plan to fully engage all interested stakeholders will be incorporated into future travel management plans. All routes would be evaluated to determine their purpose and need and the potential resource or user conflicts from motorized travel; where resource or user conflicts outweigh the purpose and need, the route would be considered for closure or for relocation outside of Dall sheep habitat.
  - Dall sheep and their habitat would be considered when evaluating route designations or closures.
  - Routes that do not have a purpose or need would be considered for closure.
  - Routes that are duplicative, parallel, or redundant would be considered for closure.
  - Seasonal/diurnal restrictions on off-highway vehicle (OHV) use would be considered in important seasonal habitats where OHV use is disrupting Dall sheep habitat.
  - Routes not required for public access or recreation with a current administrative/agency purpose or need would be evaluated for administrative access only.
  - Scheduling road maintenance to avoid disturbance during sensitive periods and times would be considered, to the extent practicable. Time of day limits, such as no use between 7:00 p.m. and 7:00 a.m., would be considered to reduce impacts on Dall sheep during breeding periods.
- In DSHA, the following requirements would apply:
  - Travel systems would be managed with an emphasis on improving the sustainability of the travel network in a comprehensive manner to minimize impacts on Dall sheep, to maintain human safety, and to prevent unauthorized cross-country travel, while meeting access needs. To do so, it may be necessary to improve portions of routes, to close routes, or to create new routes that meet user group needs, thereby reducing the potential for pioneering unauthorized routes. The emphasis of the comprehensive travel and transportation planning would be placed on having a neutral effect on Dall sheep habitat.
  - When considering an upgrade of existing routes that would change route category (BLM route categories: road, primitive road, or trail) or capacity, the larger transportation network would be considered, while protecting Dall sheep habitat.
  - Existing roads or realignments, as described above, would be used to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then any new roads would be constructed to the absolute minimum standard necessary. Apply additional effective mitigation necessary to offset the resulting loss or fragmentation of Dall sheep habitat. Plan for new routes in consideration of the larger transportation network objectives and needs, while protecting Dall sheep habitat.
- Develop an educational process to advise OHV users of the potential for conflict with Dall sheep.

H.3 CORE CARIBOU HABITAT MANAGEMENT

Three herds of fewer than 1,000 animals—the Galena Mountain Herd (GMH), Ray Mountains Herd (RMH), and Hodzana Hills Herd (HHH)—are in the planning area. Much of their ranges consist of BLM-managed land and are associated with a series of uplands north of the Yukon River, known as the Kokrine Mountains, Ray Mountains, and Hodzana Hills.

The ecology of these herds differs from larger migratory herds in the following way:

- They are considered nonmigratory because their winter and summer ranges overlap substantially.
- Their ranges are generally restricted to discrete mountain ranges.
- They do not have traditional calving grounds; whereby large numbers of animals congregate and calve in clearly delineated areas and do so consistently from year to year.

As such, land management in the ranges of these herds considers alternatives to traditional prescriptions associated with other herds, such as to protect important caribou habitat in the GMH and RMH.

H.3.1 Galena Mountain Herd

While historically the GMH has always been small, it currently numbers approximately 150 animals and is considered to be of conservation concern. The herd has been closed to all forms of hunting, including subsistence. The cause of the decline and subsequent small population size is high calf mortality due to predation. Unlike other nonmigratory herds, this herd is confined to a relatively small area in the vicinity of Galena Mountain. It is above the treeline during the spring and summer. Alpine habitat is necessary during this period, not only because it has high-quality forage but also because cows with young calves can more easily avoid predators when their vision is unobstructed by trees or flat topography. Access to and continued use of this small alpine habitat is critical to the herd's perpetuation.

Mineral potential (specifically placer and rare earth elements) within the range of the GMH is moderate to low, and interest in these resources appears to be minimal. There are neither past nor current mining claims in the proposed special management area.

H.3.2 Ray Mountains Herd

The importance of the RMH was highlighted during scoping. Subsistence hunters who rely on this herd routinely travel over 70 miles across the Kanuti Flats to it in the spring, particularly when the moose harvest is low and the Western Arctic Herd of caribou is not accessible from the villages.

Mineral potential and the occurrence of rare earth elements is high in the Ray Mountains. Many of the lands within the range of the RMH have valid State of Alaska selections. There is a large block of State mining claims in Spooky Valley and along the Kilolitna and Big Salt Rivers that will likely be developed if conveyance is completed.

Rare earth element mines are generally large surface mines. Impacts on caribou would be difficult to mitigate, and it is likely that they would simply be displaced where extensive development occurs. Should development occur, lands that remain federally managed after conveyance would be critical to maintain for continued use by the RMH.

H.3.3 Hodzana Hills Herd

During scoping, commenters raised concerns regarding the impacts of linear ROWs on caribou movement, impacts of resource development, and increased access to the HHH by hunters. They asked if regulations associated with the State's Dalton Highway Corridor Management Area should be revised or removed.

The Dalton utility and transportation corridor bisect the range of the HHH. The herd annually crosses the road, the TAPS, and other linear features and do not appear to be restricted in their movements. It appears standard stipulations regarding linear infrastructure sufficiently mitigate impacts on caribou movement.

While a few placer mines are active within the range of the HHH, these small-scale operations do not appear to affect individual caribou nor their population size, demographic features, or survival rates. While a portion of the range is State-selected, BLM-managed land unencumbered by State or Native selections next to the Dalton Highway does not have established mining claims. It is unlikely that extensive mineral development would occur over the life of the Central Yukon RMP.

H.3.4 Core Caribou Habitat Management Allocations

Approved RMP

Core habitat for the GMH and RMH that would be designated under the Approved RMP to address the issues raised during scoping. The Approved RMP proposes a ROW avoidance area in the GMH and RMH core habitat. There would be timing limitations for OHVs during calving season (May 1 through June 30). The RMH core caribou habitat would be closed to fluid mineral leasing. This alternative does not recommend a withdrawal from mineral entry in the RMH core habitat.

Core Caribou Ranges by Township

Ray Mountains

- T8, R18, FM
- T9, R15, FM
- T9, R16, FM
- T9, R17, FM
- T9, R18, FM
- T10, R15, FM
- T10, R16, FM
- T10, R17, FM
- T10, R18, FM
- T11, R17, FM
- T11, R18, FM
- T11, R19, FM
- T11, R20, FM
- T11, R21, FM
- T12, R17, FM
- T12, R18, FM
- T12, R19, FM
- T12, R20, FM
- T12, R21, FM
- T13, R17, FM
- T13, R18, FM
- T13, R19, FM
- T13, R20, FM
- T13, R21, FM
- T14, R17, FM

Galena Mountain

- T5, R15, KM
- T5, R16, KM
- T5, R17, KM
- T6, R15, KM
- T6, R16, KM
- T6, R17, KM
- T6, R18, KM
- T6, R19, KM
- T6, R20, KM

H.4 REFERENCES

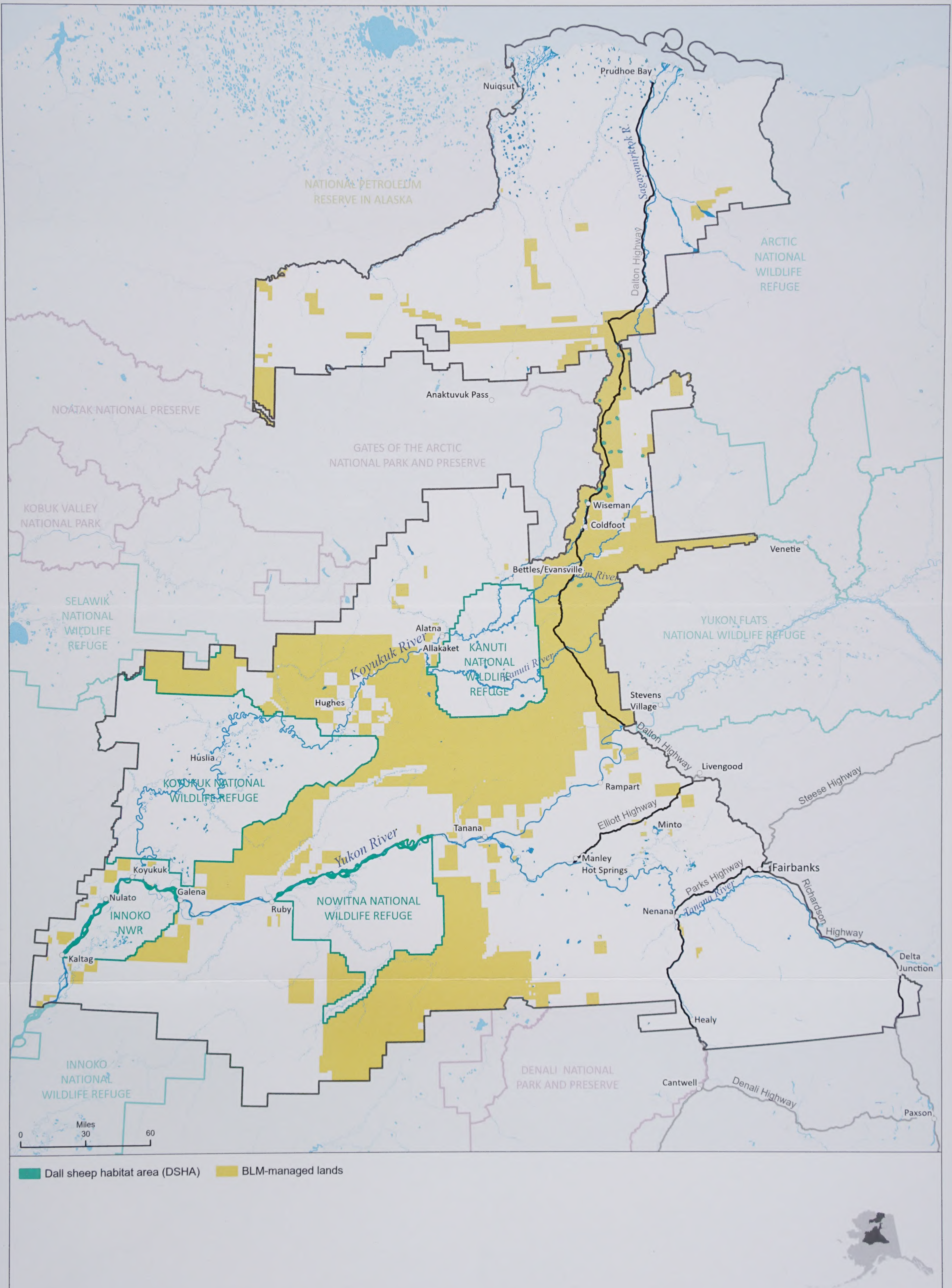
Côté, S. D. 1996. Mountain goat responses to helicopter disturbance. Wildlife Society Bulletin 24: 681–685.

Frid, A. 2003. Dall's sheep responses to overflights by helicopter and fixed-wing aircraft. Biological Conservation 110: 387–399.

Hurley, K. 2004. NWSGC position statement on helicopter-supported recreation and mountain goats. Biennial Symposium of the Northern Wild Sheep and Goat Council 14: 131–136.

Dall Sheep Habitat Areas

U.S. DEPARTMENT OF THE INTERIOR | BUREAU OF LAND MANAGEMENT | ALASKA | CENTRAL YUKON RMP/EIS


Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
Hughes
Stevens Village
Dalton Highway
Livengood
Huslia
Rampart
Steese Highway
KOYUKUK NATIONAL WILDLIFE REFUGE
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Galena
Parks Highway
Tanana River
Richardson Highway
Nulato
INNOKO NWR
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Nenana
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60
Dall sheep habitat area (DSHA)
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map H-1

Print Date: 11/07/2024

Appendix I

Land Tenure

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX I. LAND TENURE I-1

I.1 Exchange or Disposal Criteria I-2

I.2 Lands That Meet the Criteria That Are Identified for Exchange in the Approved RMP/ROD I-2

ACRONYMS AND ABBREVIATIONS

	Full Phrase
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
FLPMA	Federal Land Policy Management Act
RMP	resource management plan
ROD	record of decision
R&PP	Recreation and Public Purposes

Appendix I. Land Tenure

In preparation for this land use planning initiative, the Bureau of Land Management (BLM) conducted an inventory of the public land in the planning area to determine whether there are any tracts that meet one or more of the Federal Land Policy Management Act (FLPMA) Section 203 disposal criteria, Section 206 exchange criteria, or Alaska-specific exchanges under the Alaska National Interest Lands Conservation Act (ANILCA) or Alaska Native Claims Settlement Act.

Secretarial Order 3373, Evaluating Public Access in BLM Public Land Disposals and Exchanges, also requires the BLM to weigh public-access considerations for outdoor recreation against considerations about a tract's location or other characteristics that otherwise qualify it for disposal under FLPMA's sale or exchange criteria. These types of public-access considerations are usually for roads, especially roads leading into isolated BLM parcels. Most BLM-managed lands in Alaska are accessed via motorized and nonmotorized travel through waterways in the summer or cross-country travel, especially using snowmachines, in the winter. Because users are not using roads or primitive routes to access BLM lands, a tract's location in relation to roads for recreation access is less important than for BLM-managed lands in the lower 48 states. The lands identified for disposal or exchange in the Approved Resource Management Plan (RMP) will not have a negative impact on recreation or access.

The lands that meet the criteria to be retained, acquired, exchanged, or disposed of are identified as Zone 1, 2, or 3. These decisions have no effect on the ongoing State of Alaska land conveyance process; conveyance of Native corporation selections; allotments selected under the John D. Dingell, Jr. Conservation, Management, and Recreation Act; or other non-discretionary conveyances.

- Lands in Zone 1 would be retained under BLM management; inholdings would be considered for acquisition on a willing seller basis (areas of critical environmental concern, research natural areas, designated important habitat, high-priority riparian habitat, lands managed for wilderness character, backcountry conservation areas, and recreation assets, including special recreation management areas and extensive recreation management areas).
- Lands in Zone 2 would generally be retained but would be available for acquisition or exchange, whichever is appropriate, to enhance public resource values, improve management capabilities, or reduce the potential for land use conflict.
- Lands in Zone 3 meet the criteria for lands available for disposal or exchange (all Fairbanks Subunit parcels).
    - Disposal is considered in the Approved RMP/Record of Decision (ROD).
    - Land exchange would be considered at the implementation level to benefit public interests. Exchanges would focus on efficient management of public lands and objectives including protection of fish and wildlife habitats, cultural resources, wilderness and aesthetic values, enhancing recreational opportunities, and community expansion. Exchanges generally would not be pursued until final State and Native entitlement is reached.

Lands in Zones 2 and 3 would be reassigned to Zone 1 if the U.S. Fish and Wildlife Service includes them in future designations of important habitat under the Endangered Species Act.

I.1 EXCHANGE OR DISPOSAL CRITERIA

- Isolated parcels, such as those near Fairbanks, typically less than a township in size (23,040 acres)
- A tract that no longer serves the purpose for which it was acquired
- A tract whose disposal would serve the public objectives, such as expansion of communities and economic development or a recreation and public purposes or other lands action with reversionary clause or any other reversionary interests
- A tract that, because of its location or other characteristics, is difficult or uneconomic to manage and is not suitable for management by another federal agency
- A tract where there are minor boundary adjustments around Conservation System Unit boundaries allowed under ANILCA 103(b) (23,000-acre limit)
- A tract where disposal would promote management consolidation and ownership
- The BLM would consider mutually benefiting public interest land exchanges. Exchanges are authorized in Alaska by FLPMA Section 206, Section 22(f) of the Alaska Native Claims Settlement Act, and Section 1302(h) of the ANILCA. When considering public interest, the BLM would give full consideration to efficient management of public lands and to securing resource management objectives. Reserved federal interests in split-estate lands anywhere in the planning area may be considered for conveyance out of federal ownership.
- Before any parcel is considered for exchange or disposal, the BLM would ensure that public access and recreation opportunities are important considerations of any land tenure adjustment pursuant to Secretarial Order 3373 and BLM Informational Bulletin No. 2020-010, Evaluating Public Access in Bureau of Land Management Public Land Disposals and Exchange.

I.2 LANDS THAT MEET THE CRITERIA THAT ARE IDENTIFIED FOR EXCHANGE IN THE APPROVED RMP/ROD

ID	Description	Legal Description	Size (Acres)
AKF02000-5013	Ester Dome Observatory	T1N, R3W, S25, FM	6
AKF02000-5010	Ski Boot Hill Extension—Geophysical Observatory-1	T1N, R1W, S17, FM	5
AKF02000-5011	Ski Boot Hill Extension—Geophysical Observatory-2	T1N, R1W, S17, FM	5
AKF03000-4122	Nulato West #02	T9S, R2E, KM	3,840
AKF03000-4146	Tanana #03	T2N, R20W, FM	3,840
AKF03000-4021	Anderson #01	T6S, R8W, S31, FM	269
AKF03000-4067	Julius #05	T5S, R8W, S10, FM	161
AKF03000-4022	Anderson #02	T6S, R8W, S15, FM	51
AKF03000-4063	Julius #01	T5S, R8W, Sections 1,12, FM	1,132

ID	Description	Legal Description	Size (Acres)
AKF03000-4064	Julius #02	T5S, R7, 8W, FM	3,040
AKF03000-4065	Julius #03	T5S, R8W, Sections 26, 35, FM	1,280
AKF03000-4093	Minto #03	T3N, R10W, Sections 34, FM	640
AKF03000-4094	Minto #04	T2N, R10W, Sections 8–10, FM	1,920
AKF03000-4163	North Garnet Island	T8N, R15W, S21, FM	80
AKF02000-5023	Mineral Survey Meehan/Deep Creek Parcels	T3N, R2E	120
AKF02000-5048	Utility Corridor	T9S, R10E, S3, FM	160
AKF03000-4090	Minto-Old Townsite	T1N, R8W, FM	321
AKF03000-4132	Sagwon Airstrip	T1S, R14E, UM	2,564
AKF03000-3045	Irgnyiulk Lake	T12S, R4E, S8, UM	640
AKF03000-4068	Kakiagun Lake North	T2N, R3E, UM	2,747
AKF03000-4144	Tanana #01	T6N, R18W, FM	2,560
AKF03000-4145	Tanana #02	T5N, R19W, FM	3,174
AKF03000-4089	Minto-Elliott	T5N, R10W, Sec. 27–30, FM	2,557
AKF03000-4153	Toklat #02	T5S, R14W, FM	2,414
AKF03000-4028	Bettles #01	T24N, R19W, FM	1,280
AKF03000-4029	Bettles #02	T25N, R18W, FM	3840
AKF03000-4030	Bettles #03	T26N, R17W, FM	1,280
AKF03000-4091	Minto #01	T5N, R9W, T4N, R10W, FM	1,279
AKF03000-4092	Minto #02	T4N, R10W, FM	3,840
AKF02000-2002-	Ester Dome	T1N, R2W, S30, FM	310
AKF02000-2005	Mineral Survey Cache Creek	T1S, R2W, S3, FM	47
AKF02000-2004	Irish Gulch	T2N, R1E, S32, FM	120
AKF02000-5008	Taroka Road property	T1S, R2W, S30, FM	20

ID	Description	Legal Description	Size (Acres)
AKF02000-5009	Isberg Road property	T1S, R2W, S30, FM	20
AKF02000-5017	Mineral Survey Murphy Dome-Elliott Hwy.	T2N, R1E, S19, FM	36
AKF02000-5018	Mineral Survey Murphy Dome Road	T1N, R2W, S7, FM	60
AKF02000-5020	Mineral Survey Happy Creek	T1N, R2W, S35	40
AKF02000-5022	Mineral Survey Skoogy Creek	T2N, R1E, S1, FM	40
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R1E, S25, FM	120
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R2E, S30, FM	335
AKF02000-5025	Mineral Survey Fish Creek Mine area	T2N, 3E, S3, 4 FM	15
AKF02000-5025	Mineral Survey Fish Creek Mine area	T3N, 3E, S33, 34 FM	15
AKF02000-5026	Mineral Survey St. Patrick South	T1N, R2W, S35, FM	19
AKF02000-5026	Mineral Survey St. Patrick South	T1S, R2W, S4,5	600
AKF02000-5027	Mineral Survey Gold Hill	T1S, 2W, S3,4	40
AKF02000-5036	Green Road North Pole	T1S, R1E, S24, FM	154
AKF02000-5039	Hartman Lake	T6S, R4E, S2, FM	7
AKF02000-5040	Harding Lake	T6S, R4E, S2, FM	10
AKF02000-5041	Harding Lake Material Site	T6S, R4E, S2, FM	11
AKF02000-5050	Upper Stone Boy Creek	T2S, R16E, FM	640
AKF03000-4131	Ruby East	T10S, R17E, KM	4,480
AKF03000-4159	Yukon River-Yistletaw	T8S, R7E, S1,2, KM	370

*Recreation and Public Purposes (R&PP) Act (43 U.S. Code 869 et seq.)—This plan considers R&PP disposals on Zone 2 and 3 lands throughout the planning area. Selected lands that meet the criteria for disposal under the R&PP Act would have to be fully adjudicated before the BLM would entertain an R&PP application.

Appendix J

Recreation Management Areas and Backcountry Conservation Areas

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX J. RECREATION MANAGEMENT AREAS AND BACKCOUNTRY CONSERVATION AREAS..J-1
- J.1 Recreation Setting Characteristics Matrix J-2
  - J.1.1 Physical Component—Qualities of the Landscape J-2
  - J.1.2 SOCIAL COMPONENT—Qualities Associated with Use J-3
  - J.1.3 OPERATIONAL COMPONENT—Conditions Created by Management over Recreation Use J-4
- J.2 Sukakpak Region SRMA J-6
  - J.2.1 Supporting Information J-6
  - J.2.2 SRMA Objectives Decisions J-6
  - J.2.3 Recreation Setting Characteristic Descriptions—Backcountry J-6
  - J.2.4 Management Actions and Allowable Use Decisions J-7
- J.3 Central Dalton SRMA J-7
  - J.3.1 Supporting Information J-7
  - J.3.2 SRMA Objectives Decisions J-8
  - J.3.3 Recreation Setting Characteristic Descriptions J-8
  - J.3.4 Management Actions and Allowable Use Decisions J-8
  - J.3.5 Dalton Uplands RMZ J-8
  - J.3.6 East Dalton RMZ J-10
  - J.3.7 Yukon River Crossing RMZ J-11
  - J.3.8 Coldfoot RMZ J-14
- J.4 Nigu-Iteriak River ERMA—Primitive J-17
  - J.4.1 ERMA Objectives Decision J-17
  - J.4.2 Management Actions and Allowable Use Decisions J-17
- J.5 Brooks Range North SRMA J-17
  - J.5.1 Supporting Information J-17
  - J.5.2 SRMA Objectives Decisions J-18
  - J.5.3 Recreation Setting Characteristic Descriptions—Backcountry J-18
  - J.5.4 Management Actions and Allowable Use Decisions J-19
- J.6 Dalton Corridor BCA J-19
  - J.6.1 Goal J-19
  - J.6.2 Wildlife Objective J-19
  - J.6.3 Recreation Objective J-19
  - J.6.4 Physical Components J-20
  - J.6.5 Social Components J-20
  - J.6.6 Operational Components J-21

TABLES

Page

J-1 Sukapak Region SRMA J-6
J-2 Central Dalton SRMA, Approved RMP J-7
J-3 Brooks Range North SRMA J-18

MAPS

Page

J-1 Yukon Development Node J-12
J-2 Coldfoot Development Node J-16

ACRONYMS AND ABBREVIATIONS

	Full Phrase
AIVC	Arctic Interagency Visitor Center
ANILCA	Alaska National Interest Lands Conservation Act
BCA	backcountry conservation area
BLM	Bureau of Land Management
ERMA	extensive recreation management area
MP	milepost
OHV	off-highway vehicle
RMA	recreation management area
RMP	resource management plan
RMZ	recreation management zone
RV	recreational vehicle
SRMA	special recreation management area
SRP	Special Recreation Permit

Appendix J. Recreation Management Areas and Backcountry Conservation Areas

This appendix provides additional details involving both recreation and visitor services and backcountry conservation areas (BCAs).

Action: Designate the following BCAs:

- Dalton Corridor North (from milepost [MP] 291 to MP 299; 109,000 acres)
- Dalton Corridor South (from MP 68 to MP 199; 557,000 acres)

Action: Manage the following special recreation management areas (SRMAs):

- Sukakpak Region (from MP 181, just north of Marion Creek, to MP 265, just south of Roche Moutonnee Creek; backcountry, 412,000 acres)
- Central Dalton (904,000 acres), consisting of the following recreation management zones (RMZs):
    - Dalton Uplands (from MP 62 to MP 173; frontcountry; 339,000 acres)
    - East Dalton (from MP 68 to MP 206; semi-primitive; 565,000 acres)
    - Coldfoot (from MP 173 to MP 181; rural; 7,000 acres)
    - Yukon River Crossing (from MP 56 to MP 62; rural; 7,000 acres)
- Brooks Range North SRMA (from MP 265 to MP 291; backcountry; 137,000 acres)

Action: Manage the following extensive recreation management areas (ERMAs):

- Nigu-Iteriak River (Central Arctic Management Area): Scenic values, float trips, and remote recreation in a primitive setting

J.1 RECREATION SETTING CHARACTERISTICS MATRIX

J.1.1 Physical Component—Qualities of the Landscape

Landscape	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Remoteness (approximate distance from routes)	More than 5 miles from either mechanized or motorized routes or established landing fields.	More than 1 mile from either mechanized or motorized routes or established landing fields.	Within 0.5 miles of mechanized routes or established landing fields.	Within 0.5 miles of low-clearance or passenger vehicle routes, four-wheel drive vehicles, and off-highway vehicles (OHVs) (includes unpaved roads and private land routes).	Within 0.5 miles of primary roads and highways.
Naturalness (landscape, line, and color)	Undisturbed natural landscape.	Undisturbed natural landscape with little evidence of previous human use.	Natural landscape without any modifications and in harmony with surroundings and not visually obvious or evident.	Character of the natural landscape partially modified, but nothing overpowers the natural landscape. Character of the natural landscape retained. A few modifications contrast with the character of the landscape.	Character of the natural landscape considerably modified.
Facilities	No structures. No sign of human trails or previous use.	No structures. Foot, horse, and water trails only.	Developed trails made mostly of native materials (for example bridges made from logs). Structures are rare and isolated.	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays. Maintained and marked trails, simple trailhead developments, and basic toilets.	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.

J.1.2 SOCIAL COMPONENT—Qualities Associated with Use

Use	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Contacts with any other group (average).	Encounters with others rare.	Fewer than three encounters per day.	Three to six encounters per day.	Fifteen to 25 encounters per day off travel routes (e.g., campgrounds) and 30 or more encounters per day on travel routes. Seven to 14 encounters per day off travel routes (e.g., staging areas) and 15 to 29 encounters per day on travel routes.	People seem to be generally everywhere.
Group size (average, other than one's own group).	Three or fewer people per day. Group encounters are rare.	Six or fewer people per day. Groups are dispersed.	Four to twelve people per group. Groups are dispersed.	Thirteen to 25 people per group.	Twenty-six to 50 people per group.
Evidence of use	No alteration of the natural terrain. No sign of previous users.	No alteration of the natural terrain. Only footprints observed. Sounds of people are rare.	Areas of alteration are uncommon. Little surface vegetation wear observed. Sounds of people are infrequent.	Small areas of alteration are prevalent. Surface vegetation is gone with compacted soils observed. Sounds of people are regularly heard. Small areas of alteration. Surface vegetation showing wear with some bare soils. Sounds of people are occasionally heard.	A few large areas of alteration. Surface vegetation is absent with hardened soils. Sounds of people are frequently heard.

J.1.3 OPERATIONAL COMPONENT—Conditions Created by Management over Recreation Use

Recreation Use Management	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Access (types of travel allowed)	Foot, horse, and non-motorized travel are common. No trails or trailheads are managed for motorized activities. Snowmachine and other means of surface transportation, motorboat, and aircraft activity permissible through Alaska National Interest Lands Conservation Act 1323(b), 1110(a), and 811.	Foot, horse, and non-motorized and limited levels of dispersed mechanized travel are common. No trails or trailheads are managed for motorized activities. Snowmachine and other means of surface transportation, motorboat, and aircraft activity permissible through Alaska National Interest Lands Conservation Act 1323(b), 1110(a), and 811.	Various forms of dispersed motorized and non-motorized use may be present, but they are not substantially noticeable.	Two-wheel drive vehicles are predominant, but also four-wheel drives and non-motorized, mechanized modes of travel. Four-wheel drives, OHVs, dirt bikes, and snowmachines, in addition to non-motorized, mechanical modes of travel.	Ordinary highway automobile and truck traffic are characteristic.
Visitor services and information.	No maps or brochures available on-site.	Basic maps available. Area personnel are rarely available to provide on-site assistance.	Basic maps. Staff are infrequently present (e.g., seasonally, during high-use periods) to provide on-site assistance.	Information materials describe the recreation area and activities; staff are seasonally present; area brochures and maps; staff are on-site late spring through early fall.	Same as frontcountry classification. Staff are seasonally present.

Recreation Use Management	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Management controls.	No on-site posting/signs of visitor regulations, interpretive information, or ethics. Few use restrictions.	Basic user regulations at key access points. Minimum use restrictions.	Limited regulatory signs. Some use limitations or restrictions.	Rules, regulations, and ethics are clearly posted. Use restrictions, limitations, and closures. Some regulatory and ethics signage. Moderate use restrictions (e.g., camping and human waste).	Regulations are strict, and ethics are prominent. Use may be limited by permit or reservation.

J.2 SUKAKPAK REGION SRMA

J.2.1 Supporting Information

Under the Approved Resource Management Plan (RMP), the Sukakpak Region SRMA encompasses the area just north of Marion Creek, to just south of Roche Moutonnee Creek.

Table J-1
Sukapak Region SRMA

MP	Setting Characteristic
MP 181–237	Backcountry

J.2.2 SRMA Objectives Decisions

Objective Statement

Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities

Primary Activities—Driving and sight-seeing, photography, and watching wildlife

Secondary Activities—Camping, day hiking, birdwatching, and berry picking. There is seasonal use for big game hunting in the SRMA.

Experiences

Primary Experiences—Enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds

Secondary Experiences—Getting away from the usual demands of life, being free to make their own choices, and being with friends

Benefits

Personal/individual—A greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom

Community/social—A greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world

Environmental—Increased knowledge and understanding of regional ecosystems and greater awareness of methods to minimize recreation impacts

J.2.3 Recreation Setting Characteristic Descriptions—Backcountry

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 268 road miles from the southern edge of the SRMA, at MP 181; it continues to MP 265 just south of Roche Moutonnee Creek. The area has mountain peaks of global recognition, such as Sukakpak and Snowden Mountains. There are several waysides in the SRMA, which culminate near the north end, with far-reaching vistas of the Brooks Range and valleys from the Chandalar Shelf pullout at MP 237.

Social Components—Recreation users in this SRMA can at times expect encounters with groups of 15 when stopping at points of interest along the roadway. In most waysides, group sizes typically range from 2 to 10 individuals with a small number of commercial tour companies accessing the area and using 15-passenger vans to transport their guests. Use in the SRMA increases throughout the summer, with a peak in late summer/early fall for sheep and caribou hunting activities. The community of Wiseman, with residents living a modern-day subsistence lifestyle, provides travelers with an opportunity to learn about life in the far north.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The Bureau of Land Management (BLM) has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Community Center in Fairbanks, and online. There is signage along the roadway directing travelers to recreation opportunities, and information materials, such as the Dalton Highway Guide, are available throughout the year at selected sites. Staff are present seasonally. Use may be limited and may require a permit.

J.2.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. Special Recreation Permits (SRPs) are issued to businesses, organizations, and individuals to allow the use of specific public lands and related waters for commercial, competitive, and organized group use. Recreation Use Permits are required at approved sites, such as developed day use areas or visitor centers.

Other Programs—By Alaska Statute 19.40.210, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to the Alaska National Interest Lands Conservation Act (ANILCA).

J.3 CENTRAL DALTON SRMA

J.3.1 Supporting Information

The Central Dalton SRMA is described as the inner corridor of Public Land Order 5150 and is bounded by the Yukon River Crossing RMZ to the south, the Coldfoot RMZ to the north, and, for much of the SRMA, the BCA to the west.

Under the Approved RMP, the SRMA is adjacent to the Dalton Corridor BCA. The Dalton Uplands RMZ encompasses the area from MP 62 to MP 173. East Dalton RMZ consists of the outer corridor lands from approximately MP 68 (Ray River) to MP 206 (Bettles River). It is bordered by the Yukon River Crossing RMZ to the south, the Sukakpak Region SRMA to the north, general BLM land for much of the east, and the inner Corridor of the Dalton to the west. See **Table J-2**.

Table J-2
Central Dalton SRMA, Approved RMP

RMZs	Dalton MP	Setting Characteristics
Dalton Uplands	MP 62–173	Frontcountry
East Dalton	MP 68–206	Semi-primitive
Yukon River Crossing	MP 56–62	Rural
Coldfoot	MP 173–181	Rural

High-quality experiences in the SRMA include the Arctic Interagency Visitor Center (AIVC), which provides a focal point for the BLM, the United States Fish and Wildlife Service, and the National Park Service to communicate to travelers where opportunities to recreate exist on public lands. The number one attraction is a visit to the Arctic Circle wayside, where adventurers can pose for a picture in front of the well-known Arctic Circle "trophy sign" and receive a certificate that they have crossed into the northernmost region of the world.

Waysides with interpretive signs describing the natural and cultural history of the region support recreation users looking for a respite from the many challenges of driving the Dalton Highway. The SRMA has three campgrounds: Five Mile, Arctic Circle, and Marion Creek. Campgrounds are open during the summer season; however, roadside camping in waysides and idle gravel pits occurs throughout the year. Night-sky viewing, and winter travel are gaining in popularity as visitors travel the area in search of the aurora borealis (northern lights). The landscape is free of noise and light influences, which provides for high-quality night-sky viewing.

J.3.2 SRMA Objectives Decisions

The entire SRMA is within designated RMZs. See the descriptions given for the Dalton Uplands, East Dalton, Yukon River Crossing, and Coldfoot RMZs, below.

J.3.3 Recreation Setting Characteristic Descriptions

The entire SRMA is within designated RMZs. See the descriptions given for the Dalton Uplands, East Dalton, Yukon River Crossing, and Coldfoot RMZs, below.

J.3.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska Statute 19.40.210, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

J.3.5 Dalton Uplands RMZ

Dalton Uplands RMZ Supporting Information

The Dalton Uplands RMZ encompasses a linear section of lands described as the inner corridor of Public Land Order 5150 from MP 62 to MP 165. In the Approved RMP, it is bordered by the private and non-recreation management area (RMA) land to the south, private land around Coldfoot to the north, and, for much of the RMZ, the BCA on the west and the East Dalton RMZ on the east.

Activities that draw visitors to this unique road-accessible region include taking day trips to Finger Mountain, viewing the Arctic Circle, vehicle touring, and fishing in pristine streams. Other recreation sites of significance are Grayling Lake, Chapman Lake, and the numerous waysides with wildlife and scenic viewing opportunities.

The Dalton Uplands RMZ will be managed to provide frontcountry recreation experiences. Management within the RMZ will provide for sustainable recreation opportunities.

Dalton Uplands SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities are driving and sight-seeing, photography, and watching wildlife. Secondary activities are camping, day hiking, birdwatching, and berry picking.

Experiences—Primary experiences are enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds. Secondary experiences are getting away from the usual demands of life, being free to make their own choices, and being with friends.

Benefits—Personal/individual benefits are a greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom. Community/social benefits are greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world. Environmental benefits are an increased knowledge and understanding of regional ecosystems and a greater awareness of methods to minimize recreation impacts.

Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The Dalton Uplands RMZ encompasses the area from MP 62 to MP 173 at Chapman Lake. The character of the natural landscape is retained in the majority of the RMZ. A few modifications contrast with the character of the landscape where the Trans-Alaska Pipeline System is aboveground and visible.

Rustic facilities, such as campsites, restrooms, trailheads, and interpretive displays, exist throughout the road corridor of the RMZ. There are maintained and marked trails of short distance, and simple trailhead developments. The Finger Mountain wayside and the Arctic Circle wayside are two of the most visited waysides in the RMZ. Visitation at the Arctic Circle wayside reaches into the tens of thousands, which puts pressure on the infrastructure. The RMZ also includes the Arctic Circle Campground one-half mile from the Arctic Circle wayside.

Social Components—Travelers in the RMZ can expect to see groups ranging in size from 2 to 50 people on travel routes and 50 or more vehicle encounters per day on highway travel routes. Encounters with smaller groups occur during off-peak seasons.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the RMZ. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Arctic Circle Wayside and Campground. There is signage along the roadway directing travelers to recreation opportunities. Information materials are available throughout the year at selected sites.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska Statute 19.40.210, the RMZ is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

J.3.6 East Dalton RMZ

East Dalton RMZ Supporting Information

The East Dalton SRMA encompasses the outer corridor lands from approximately MP 68 (Ray River) to MP 206 (Bettles River), covering lands described as the outer corridor. Visitors to this area are few due to the rugged terrain.

Consisting of the Central Dalton SRMA outside of RMZs designated in the proposed RMP, it is bordered by the Dalton Uplands RMZ, as well as private and other BLM-managed land to the south, west, and north. It is bordered by BLM-managed and private land, as well as Yukon Flats National Wildlife Refuge, to the east.

Activities that draw visitors to this region include hunting, hiking, and fishing in pristine streams. Areas of significance are the Kanuti River valley, Finger Mountain hills, Upper Jim River, Upper South Fork Koyukuk River, and Prospect Hills.

The East Dalton RMZ will be managed to provide for semi-primitive recreation experiences. Management within the RMZ will provide for sustainable, dispersed recreation opportunities.

East Dalton SRMA/RMZ Objectives Decisions

Objective Statement—Users of this remote area were not captured in visitor assessment data on realization of the targeted experiences and benefit outcomes listed below.

Activities—The primary recreational activities anticipated in this area are photography, wildlife watching, day hiking, fishing, and camping. Bow hunting is allowed by Alaska Statute 5 miles from either side of the highway. Rifle hunting is allowed outside the 5-mile limit set by the State. Despite State restrictions, subsistence uses are allowed under ANILCA.

Experiences—The BLM anticipates that recreation users in this area will want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—The BLM anticipates that the benefits that recreation users will achieve in the SRMA will include a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities.

Recreation Setting Characteristic Descriptions—Semi-Primitive

Physical Components—The remoteness of this area is in relation to a stretch of the Dalton Highway that runs roughly parallel to the western RMZ boundary, starting at approximately 150 road miles north of the urban area of Fairbanks. There are no BLM visitor or recreation facilities in the RMZ.

The character of the natural landscape is retained, with few modifications that contrast with the character of the landscape. Some areas outside of but visible from the RMZ are partially modified by the linear features of the Trans-Alaska Pipeline System and Dalton Highway, but these elements do not overpower the natural landscape.

Social Components—Recreation users in this RMZ can at times expect fewer than three encounters with groups per day. Group sizes average six or fewer individuals. Use of this RMZ varies by season and time of day. Users will typically experience evidence of use in the form of small areas of alteration, some surface vegetation showing wear with some bare soils, or sounds of other people which may occasionally be heard.

Operational Components—The RMZ is accessible from the Dalton Highway. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. There is signage along the Dalton Highway as well as staff at the Yukon Crossing Contact Station and Arctic Circle Wayside and Campground, outside of the RMZ, directing travelers to recreation opportunities within the RMZ.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

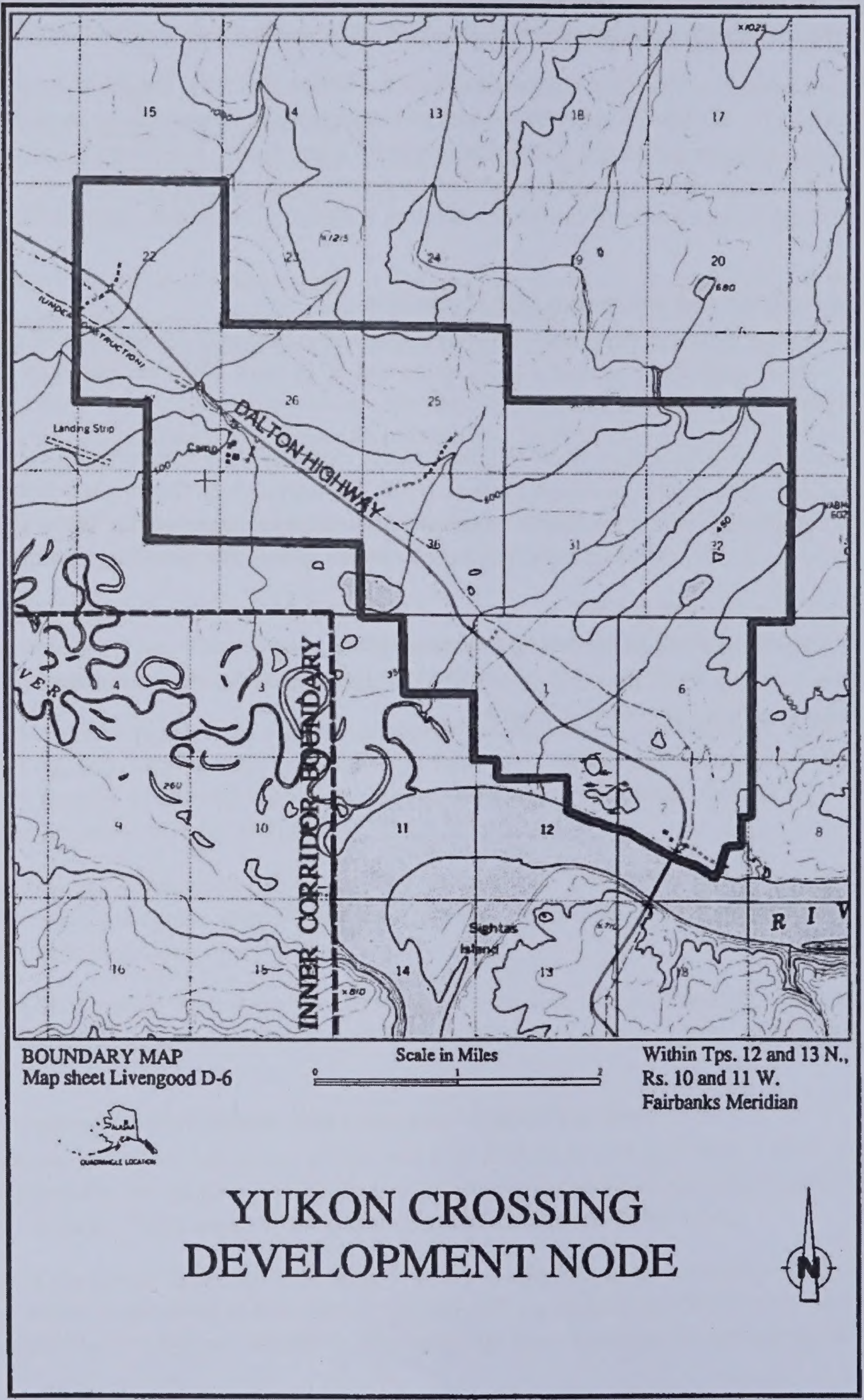
Other Programs—By Alaska Statute 19.40.210, the RMZ is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

J.3.7 Yukon River Crossing RMZ

Yukon River Crossing RMZ Supporting Information

The Yukon River Crossing RMZ, from MP 56 to MP 62, is described as the area known as the Yukon River Crossing Development Node, as shown in **Map J-1**.

Map J-1
Yukon Development Node


DALTON HIGHWAY
(UNDER CONSTRUCTION)
Landing Strip
Camp
INNER CORRIDOR BOUNDARY
Sightas Island
R I V
V E R
BOUNDARY MAP
Map sheet Livengood D-6
Scale in Miles
0
1
2
Within Tps. 12 and 13 N.,
Rs. 10 and 11 W.
Fairbanks Meridian
QUADRANGLE LOCATION
YUKON CROSSING
DEVELOPMENT NODE
N

The Yukon River Crossing RMZ attracts recreationists seeking to experience the Yukon River and is an entry point to hunting, fishing, sight-seeing tours, and access to nearby villages. River access for hunters using boats in pursuit of big game is a popular fall activity for multigenerational families and friends. Reaching the destination of the legendary Yukon River is a highlight for many road touring travelers. The area includes rustic, seasonal lodging and restaurants, a BLM contact station with an information kiosk, a boat ramp and boat trailer parking, and the Five Mile Campground with a dump station and nearby artesian well.

Yukon River Crossing SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities include driving and sight-seeing, photography, bicycling, motorcycling, watching wildlife, day hiking, walking or running, fishing, and camping. During the fall hunting season, the boat launch at the Yukon River bridge provides access for hundreds of hunters in search of moose and other game.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal of traveling the Dalton Highway and reaching the Yukon River Crossing.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 140 road miles from the Yukon River bridge. The BLM manages visitor facilities in the RMZ that are located at the Yukon River Crossing; they include a contact station that is staffed in summer, which receives approximately 9,000 visitors per year.

There are two decks, with interpretive panels, overlooking the Yukon River. An additional deck is near the contact station, with information about the Trans-Alaska Pipeline and construction of the Yukon River bridge. There are outhouses near the contact station and an area for picnics. On the west side of the road is a boat launch, with space for vehicle and boat trailer parking as well as outhouse facilities. The Yukon River Camp is located on BLM-managed lands through a realty lease. It offers meals, accommodations, and fuel. In addition, there is a truckers' wayside with a large pullout and outhouse on the west side of the road.

The Five Mile Campground includes a limited number of developed sites that have picnic tables and fire rings. A dump station is near the campground and is open during the summer season. An artesian well with potable water is adjacent to the campground.

Social Components—When arriving at the Yukon River Camp, recreation users in this RMZ can at times expect encounters with groups of 50. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day. Campground users will typically experience small camping parties, with users in tents and a variety of recreational vehicles (RVs).

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreational uses and are required at approved sites.

Other Programs—By Alaska Statute 19.40.210, the RMZ is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

J.3.8 Coldfoot RMZ

Coldfoot RMZ Supporting Information

The Coldfoot RMZ encompasses lands from MP 173 to MP 181. **Map J-2** includes the inner utility corridor, as described in the Utility Corridor RMP/Environmental Impact Statement, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle on the Dalton Highway. Activities that draw visitors to the Coldfoot RMZ are the world-class AIVC, access into remote areas of the foothills of the Brooks Range by foot, and access to rural and remote areas via bush plane from the Coldfoot airport. The RMZ also has the Marion Creek Campground and the Coldfoot truck stop and restaurant, which serve as a fueling station and mail stop for many tourists, truckers, and local placer miners. Management in the RMZ will provide for sustainable recreation opportunities.

Coldfoot SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, river float trips, visitor center and programs, and camping.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal of traveling the Dalton Highway.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 259 road miles from Coldfoot. The BLM manages visitor facilities in the RMZ in the Coldfoot Development Node. Recreation facilities in the Coldfoot RMZ include the AIVC, interpretive hiking trails spanning from the AIVC, interpretive kiosks at trailheads, the pioneer cemetery with interpretive panels, a replica of a miner's cabin, and a drift mining display. Five miles north of Coldfoot and within the RMZ is Marion Creek Campground, a 27-site fee campground with RV parking, pull-through sites, potable water, an information kiosk, and outhouses.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50 when arriving in the Coldfoot truck stop. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Large concentrations of industrial traffic are to be expected. Campground users typically experience small camping parties with users in tents and a variety of RVs. Seasonal spikes occur in the RMZ with different recreation user groups from late February through early October.

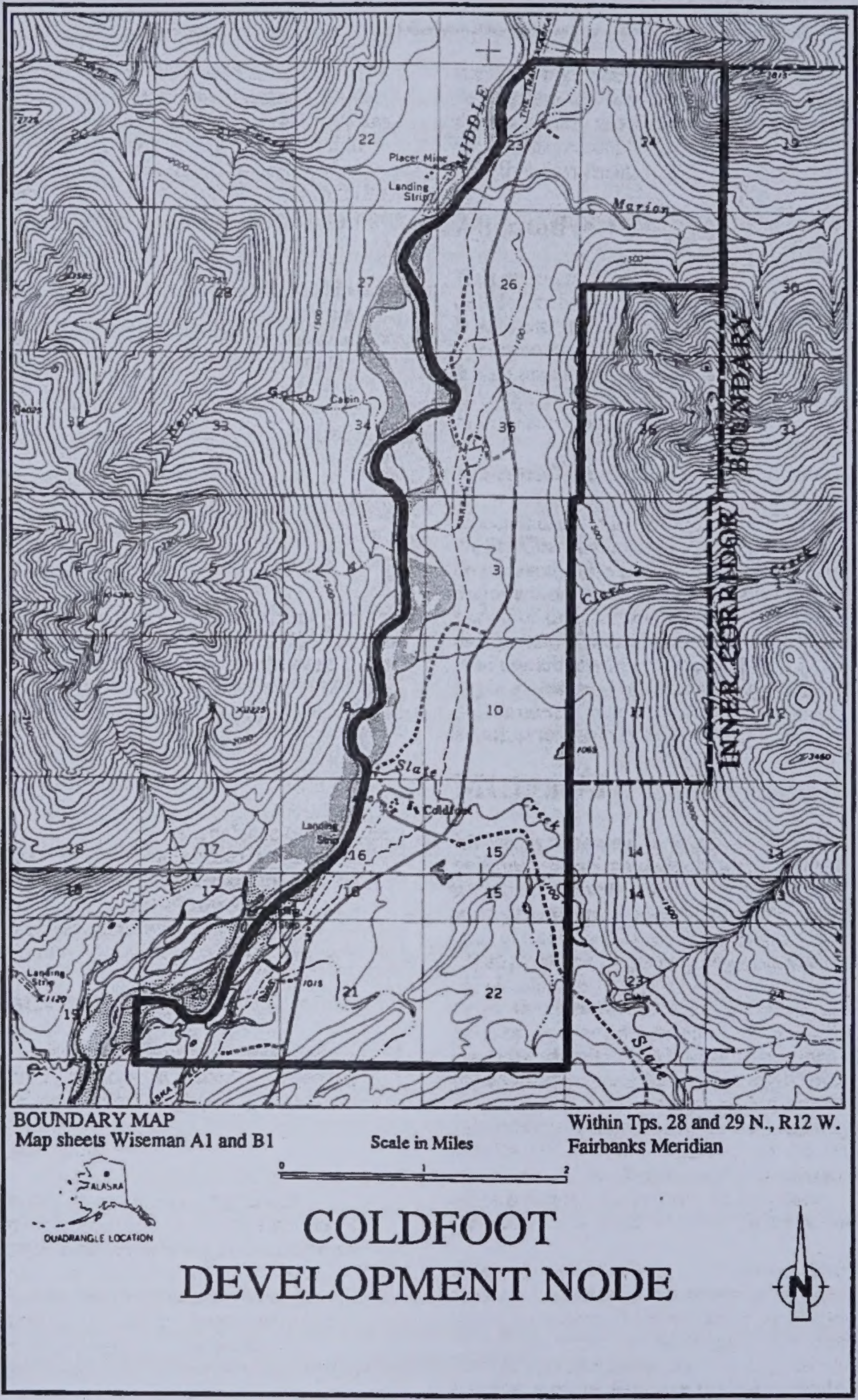
Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the AIVC. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska Statute 19.40.210, the RMZ is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

Map J-2
Coldfoot Development Node


Placer Mine
Landing Strip
MIDDLE
Marion
Cabin
Coldfoot
Slate Creek
Clara Creek
INNER CORRIDOR BOUNDARY
22
23
24
26
27
34
35
36
3
10
11
15
16
21
22
BOUNDARY MAP
Map sheets Wiseman A1 and B1
Scale in Miles
0
1
2
Within Tps. 28 and 29 N., R12 W.
Fairbanks Meridian
ALASKA
QUADRANGLE LOCATION
COLDFOOT
DEVELOPMENT NODE
N

J.4 NIGU-ITERIAK RIVER ERMA—PRIMITIVE

J.4.1 ERMA Objectives Decision

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities are river running (rafting, canoeing, packrafting) and backpacking.

Experiences—Primary experiences are enjoying the sights and smells of nature, being away from crowds of people, and being free to make your own choices.

Benefits—Personal/individual benefits are greater connection with nature, increased knowledge and understanding of regional ecosystems, and heightened awareness of the natural world.

Recreation Setting Characteristic Descriptions—Primitive

Physical Components—This ERMA is more than 5 miles from mechanized or motorized routes or established landing fields. It consists of largely undisturbed natural landscape, with no structures and no sign of human trails or previous use.

Social Components—Encounters with others in this area are rare and may include three or fewer people per day. Group encounters are rare. Typically, there is no evidence of use from alteration of the natural terrain or signs of previous users.

Operational Components—Foot, horse, and non-motorized travel are common in this area. No trails or trailheads are managed for motorized activities. Snowmachine and other means of surface transportation, motorboat, and aircraft activity are permissible through ANILCA 1323(b), 1110(a), and 811. No maps or brochures are available on-site, and there are no on-site postings or signs of visitor regulations, interpretive information, or ethics. There are few use restrictions.

J.4.2 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites. SRPs are required for any commercial recreation activities within this ERMA.

Other Programs—Designate for seasonal, non-motorized use. Access into the ERMA would be by airplane, foot or, in winter, snowmachine.

J.5 BROOKS RANGE NORTH SRMA

J.5.1 Supporting Information

The Brooks Range North SRMA encompasses the area MP 265, MP 291 (see **Table J-3**). These include portions of the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/Environmental Impact Statement, signed in January 1991.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Activities that draw visitors to this unique road-accessible region include Dall sheep hunting in the Brooks Range; primitive backcountry camping within a short distance of the road; bridge-to-bridge river float trips; vehicle touring through the taiga, mountains, and arctic tundra; fishing in pristine streams; learning about the lifestyle of subsistence families; and visiting the world-class AIVC.

Table J-3
Brooks Range North SRMA

Dalton MP	Setting Characteristic
MP 265–291	Backcountry

J.5.2 SRMA Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities are driving and sight-seeing, photography, and watching wildlife. Secondary activities are camping, day hiking, birdwatching, and berry picking. Hunting is a seasonal high-use activity.

Experiences—Primary experiences are enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds. Secondary experiences are getting away from the usual demands of life, being free to make your own choices, and being with friends.

Benefits—Personal/individual benefits are a greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom. Community/social benefits are a greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world. Environmental benefits are increased knowledge and understanding of regional ecosystems and a greater awareness of methods to minimize recreation impacts.

J.5.3 Recreation Setting Characteristic Descriptions—Backcountry

Physical Components—The remoteness of the Brooks Range North SRMA is in relation to the urban area of Fairbanks, which is 329 road miles from the southern edge of the Brooks Range North SRMA (at MP 265); the SRMA continues to MP 291. BLM-managed visitor facilities in the SRMA are located at Galbraith Lake Campground (MP 275), which includes 12 developed sites with picnic tables and fire rings. A state-leased airfield near the campground is used by private and commercial pilots; state, and federal agencies; and Alyeska, in support of the Trans-Alaska Pipeline System. Access to boat float trips for the Atigun River is at MP 271.

Social Components—Recreation users in this SRMA can at times expect encounters with groups of 15 when stopping at points of interest. When near the highway, group sizes range from 2 to 15 individuals, with commercial tour companies using 15-passenger vans. In the backcountry, group sizes range from 2 to 12, with up to six groups encountered per day. Use in the SRMA increases throughout the summer with a peak in late summer/early fall for sheep and caribou hunting.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. Away from the roads, personal and commercial (guided) visitors are present. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. BLM staff has an intermittent presence seasonally from mid-May through the end of September. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use may be limited and may require a permit.

J.5.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move at least 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites. The Toolik Lake RNA would be closed to camping without an authorization.

Other Programs—By Alaska Statute 19.40.210, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Additionally, per Alaska Statute 16.05.789, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean. These laws do not restrict subsistence use or access specifically allowed pursuant to ANILCA.

J.6 DALTON CORRIDOR BCA

J.6.1 Goal

Conserve backcountry conservation management criteria areas and provide for dispersed wildlife-dependent recreation through BCAs.

J.6.2 Wildlife Objective

Manage the areas to protect their intact and undeveloped character and manage habitats to support migration/movement corridors for recreationally important species of fish and wildlife; big game winter range, summer range, parturition areas, migration corridors, and associated stopover areas; and migratory bird habitats.

J.6.3 Recreation Objective

Provide for high-quality, wildlife-dependent, dispersed recreation opportunities, and foster realization of the targeted experiences and benefits listed below:

- Activities:
  - Hunting
  - Backpacking and climbing
  - Rafting
  - Dog sledding
  - Camping
  - Wildlife viewing and nonconsumptive tourism
  - Environmental and ecological studies
- Experiences:
  - Enjoying the area's wildlife, scenery, views, and aesthetics
  - Experiencing the natural surroundings with scant industrial disruptions
  - Seeking primitive recreation in untrammeled landscapes
  - Authentic personal challenge, subsistence, or sport
- Benefits:
  - Personal:
    - An improved opportunity to access remote public lands
    - A closer relationship with the natural world
    - A greater understanding of the importance of wildlife to quality of life

    - Developing stronger ties with family and friends
    - Living a more outdoor-oriented lifestyle
    - Affordable backcountry recreation
  - Community/Social:
    - Strengthening relationships with family and friends
    - A greater household awareness and appreciation of the cultural heritage
    - Providing dispersed recreation opportunities, which enhance the experience
  - Environmental:
    - Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts
    - Promoting land connectivity and preventing fragmentation of habitat and big game ranges
  - Economic:
    - Maintaining consumptive and nonconsumptive tourism revenue

J.6.4 Physical Components

The setting is primitive.

Remoteness (approximate distance from routes)

The BCA retains the current level of remoteness being 5 miles from either mechanized, motorized routes or established landing fields. The existing, but varied, level of naturalness is maintained as an undisturbed natural landscape. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from the Dalton Highway. New rights-of-way (e.g., communication sites and utilities) would be colocated within existing disturbances or at existing sites.

Naturalness (landscape texture form, line, and color)

The existing, but varied, level of naturalness is maintained. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from the Dalton Highway. New rights-of-way (e.g., communication sites and utilities) would be colocated within existing disturbances or at existing sites.

Visitor Facilities

The Arctic Interagency Visitors Center with basic visitor amenities remains available.

J.6.5 Social Components

The setting is primitive.

Contacts (with other groups)

Participants encounter a primary use season along the Dalton Highway (April through September) with user groups divided into three categories: road users, frontcountry users, and backcountry users. Road dwellers expect numerous encounters per day, whereas frontcountry users expect fewer than 10 encounters per day; beyond 1 mile from the road, encounters are fewer than two group sightings per week.

Group Size

Participants encounter a primary use season (April through September) and average up to six people per group in areas classified as frontcountry. Participants average typically one to four people per group in areas classified as backcountry.

Evidence of Use

There remains slight visible evidence of use (dispersed social trails, limited trailheads, and parking areas). There are some trailing paths with evidence of foot traffic during snow-free seasons. Snow season use will be more evident with snowmachine trails and dog mushing trails, but this use is expected in a semi-primitive environment.

J.6.6 Operational Components

The setting is semi-primitive.

Public Access (types of public travel allowed)

Beyond the road system, bush aircraft, raft, foot traffic, dog team, boat, and equestrian use are predominant in the BCA. Some evidence of motorized use is to be expected with the dispersed and vast terrain.

Visitor Services and Information

No maps or brochures are available on-site. Contacts with BLM staff are by chance and unlikely. Visitor services are available in Fairbanks, Yukon Crossing, and Coldfoot.

Visitor Management Controls and Regulations

There is no on-site posting or signage of visitor regulations, interpretive information, or ethics. The user has responsibility to research knowledge of restrictions from information the BLM provides. There are moderate use restrictions (e.g., camping and human waste). Use may require a permit.

This page intentionally left blank.

Appendix K

Reclamation Requirements for All Surface-Disturbing Activities

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX K. RECLAMATION REQUIREMENTS FOR ALL SURFACE-DISTURBING ACTIVITIES K-1

- K.1 Introduction K-1
- K.2 Surface-disturbing Activities K-2
- K.3 Potential Natural Conditions K-3
- K.4 Reclamation Requirements K-4
  - K.4.1 Time Frames K-4
  - K.4.2 Exceptions K-4

TABLE

Page

K-1 Interim Benchmark Objectives for Aquatic AIM K-6

ACRONYMS AND ABBREVIATIONS

	Full Phrase
AIM	Assessment, Inventory, and Monitoring
AO	Authorized Officer
BLM	Bureau of Land Management
PNC	potential natural condition
RMP	resource management plan

Appendix K. Reclamation Requirements for All Surface-Disturbing Activities

K.1 INTRODUCTION

The Bureau of Land Management's (BLM) assessment, inventory, and monitoring (AIM) strategy standardizes field methods, electronic data capture and storage, and appropriate sample designs. This allows the BLM to collect data once and use the data for multiple applications from broad- to local-scale assessments of management objectives. At the broad scale, AIM data can be used to characterize the range of potential natural conditions (PNCs), from which the condition and trend of individual plots or stream reaches can be compared to assess the attainment of management objectives. The BLM's Land Use Planning Handbook H-1601-1 states that "Effectiveness monitoring is the process of collecting data and information in order to determine whether or not desired outcomes (expressed as goals and objectives in the land use plan) are being met (or progress is being made toward meeting them) as the allowable uses and management actions are being implemented." It is BLM policy that AIM data will be used to assess the effectiveness of resource management plans (RMPs) in meeting land use planning objectives (IM 2023-043 Assessment Inventory and Monitoring (AIM) data application to Land Use Plan Effectiveness and NEPA Analysis).

The Central Yukon RMP planning area includes large expanses of intact landscape. The primary divergence from natural conditions occurs with surface-disturbing activities from authorized actions, as well as trespass and emergency response actions. BLM regulations governing minerals and realty authorizations include general reclamation standards. However, they are qualitative, cannot be readily compared between programs or projects, and in some cases are expected to be refined through the land use planning process. For example, BLM Handbook H-3809-1 (Section 5.2.3) states, "Land use plans can be used to set reclamation objectives or identify the location of applicable measures needed to meet the performance standards. For example, a land use plan may be used to identify the location-specific measures that need to be in a fisheries rehabilitation plan submitted under 43 Code of Federal Regulation 3809.401(b)(3)(v), in order to meet the fisheries rehabilitation requirement under 43 Code of Federal Regulation 3809.420(b)(3)(ii)(E). Another example is for the land use plan to describe the species, seed mix, or treatments applicable to reclaiming surface disturbance in certain portions of the planning area."

AIM data characterize the range of resource conditions across the landscape using measurable, repeatable indicators. IM 2023-043 requires use of AIM data to assess RMP effectiveness, states "…if objectives are not met or if the area is not making progress toward meeting the objectives, the field office will conduct a causal factor analysis and whether or not the cause is the result of BLM decisions, the resulting report should discuss if and how the BLM can work to reduce or eliminate any of the causal factors." For allocative activities, such as opening an area to off-highway vehicle use, a monitoring program based on AIM protocols can provide after-the-fact monitoring of outcomes to help inform adaptive management strategies. However, for surface-disturbing authorizations, assessing reclamation results to ensure they effectively meet resource condition objectives as they are carried out avoids the need for adaptive response.

In addition, a common, measurable reclamation requirement applied to all surface-disturbing activities means that reclamation standards and evaluation metrics on public lands become a known quantity, allowing industry and managers to make more informed decisions with less uncertainty. This provides advantages for both industry and land managers, including:

- National Environmental Policy Act and permitting can be streamlined by providing a robust, reusable framework and terminology to standardize the analysis of reclamation plans, regardless of activity.
- Industry can rely on reclamation requirements and success criteria that do not change from operation to operation, regardless of the nature of the activity, providing consistency and predictability that are critical to successful business decisions.
- An appropriate ecological context based on site potential and actual range of environmental variability can eliminate perceptions of unrealistic reclamation expectations and perceptions that different operators are held to different standards.
- Operators or contractors, or both, can have trained crews that can assess reclamation at many different types of operations using the same data and methods that the BLM uses.
- The BLM can more readily achieve consistency across authorizations and have improved confidence that the decisions will achieve desired resource conditions.
- The BLM can confidently demonstrate how management of authorized activities is meeting RMP objectives, achieving land health standards, and avoiding undue and unnecessary degradation of public lands.

The BLM would use the PNCs derived from AIM data to develop RMP objectives and reclamation plans with the goal of preventing unnecessary or undue degradation. Regardless of the nature of the activity, minimum reclamation objectives for all surface-disturbing activities in the planning area would be to meet the requirements of applicable law, regulation, and policy; remove all wastes and hazards; achieve erosion control and soil stability; establish self-sustaining native vegetation; and prevent the spread of nonnative invasive species. In addition, reclamation would be required to result in the recovery of aquatic and terrestrial habitats to within PNCs for the Central Yukon RMP planning area based on the distribution of selected AIM indicators (see Appendix D in AIM National Aquatic Monitoring Framework Technical Reference 1735-1 and BLM Core Indicators and Methods Technical Note 440). To achieve these objectives, reclamation that meets the standards herein would be required for all surface-disturbing activities in the planning area initiated under this RMP.

K.2 SURFACE-DISTURBING ACTIVITIES

For purposes of these standards, surface-disturbing activities are defined as those that involve excavation, earthwork, soil disturbance, soil compaction, stream bank alteration, increased soil erosion potential, vegetation removal, or vegetation damage extensive enough to affect vegetation health beyond one growing season.

The approach to achieving these standards would vary based on the following categories of surface-disturbing activity:

- **New authorized activities that afford the opportunity for pre-activity analysis and planning—** The proponent for authorized surface-disturbing activities would be required to conduct reclamation in accordance with these standards. Before issuing an authorization, the BLM may, at the discretion of the BLM Authorized Officer (AO) when not already required by regulation, require that the applicant for such activities provide a reclamation plan explaining how they would conduct reclamation and how they would monitor reclamation success to ensure these requirements were met.

The BLM may also require that the applicant collect relevant baseline data and provide the data to the BLM before issuing an authorization, when such baseline data are required to determine the appropriate PNCs for the site, or when it is believed that pre-disturbance site conditions may be at a departure from PNCs. Note that activities authorized prior to adoption of this land use plan are subject to the requirements of the plan in effect at the time they were authorized. Direction herein would not change reclamation requirements for previously authorized activities.

- **Modifications to previously authorized activities**—In general, reclamation requirements for modifications of previously authorized activities would be the same as those for new authorized activities. However, reclamation requirements for modifications of previously authorized activities would take into account shifted baseline conditions. In such circumstances, the AO would exercise discretion and flexibility in applying the exceptions in **Section K.4.2**.
- **Emergency response activities, such as fire suppression, oil spill response, or search and rescue**—The BLM would coordinate with emergency response organizations to achieve reclamation that meets these standards to the greatest degree possible.
- **Unauthorized activities, such as trespass, vandalism, or accidents**—The BLM would use available authorities to ensure that responsible parties reclaim disturbed public lands in accordance with these standards.

K.3 POTENTIAL NATURAL CONDITIONS

PNCs represent the range of chemical, physical, and biological conditions expected at a site under minimal anthropogenic impacts, but they include natural disturbances. This concept is prevalent in our everyday lives where percentiles are used as clinical indicators to assess the size and growth of children in the United States. Clinical assessments help to understand the range of human health, whereas AIM assessments help understand the range of PNCs to prevent unnecessary or undue degradation.

In the case of RMP objectives and reclamation plans, the BLM uses indicators of ecosystem health and percentiles to assess the attainment of management objectives. For indicators that are expected to decrease with disturbance (e.g., vegetation cover or species richness), values above the 25th percentile would be considered within PNCs. Values between the 25th and 5th percentile would be considered a moderate departure from PNCs, and values below the 5th percentile would be considered a major departure from PNCs. For indicators that are expected to increase with disturbance (e.g., the amount of bare ground, nonnative invasive plant species, and the proportion of soil surface in large intercanopy gaps), values below the 75th percentile would be considered within PNCs. Values between the 75th and 95th percentile would be considered a moderate departure from PNCs, and values above the 95th percentile would be considered a major departure from PNCs.

In practice, that means up to 75 percent of the representative AIM sites could be in better condition than the reclaimed site, which would only need to be in a similar condition as the lower 25 percent of the range of natural conditions (less in some cases; see **Section K.4.2**). This may result in a “lower bar” for some reclamation than current guidance. However, use of AIM ensures that reclamation results can be measured to avoid subjectivity and are representative of PNCs and site potential within the region.

K.4 RECLAMATION REQUIREMENTS

Reclamation for surface-disturbing activity will be determined to be complete when the following criteria have been met:

- Meet all reclamation requirements in applicable law, regulation, or policy
- Remove or remediate any hazardous materials associated with the activity
- Remove or remediate any physical hazards resulting from the activity
- Remove all solid waste and debris associated with the activity
- Remove all associated buildings, structures, support facilities, and equipment, unless specifically authorized to remain
- Regrade and reshape the land to conform with adjacent landforms and to provide drainage control
- Establish measures necessary to control erosion, landslides, and water runoff
- Salvage and replace topsoil as a growth medium to the extent practicable
- Establish conditions within PNCs for selected AIM indicators:
  - For sites outside the 100-year floodplain of a perennial stream, establish conditions within PNCs for the following terrestrial AIM core indictors: amount of bare ground, vegetation cover, nonnative invasive plant species, and proportion of soil surface in large intercanopy gaps.
  - For sites within the 100-year floodplain of a perennial stream, establish conditions within PNCs for the following aquatic AIM indicators: bank overhead cover, bank cover and stability, percent riffle, floodplain connectivity, and riparian vegetation (understory and ground cover metrics). Interim benchmark objectives for aquatic AIM are outlined in **Table K-1**, below. These benchmarks will be updated based on the best available data for the region and latest science.

K.4.1 Time Frames

Time frames for achieving reclamation standards in some areas may be specified in the appropriate section of this plan. Some activities may specify a longer time frame in the authorization. For activities where the time frame is not otherwise specified, the BLM would require the design of reclamation methods to achieve reclamation objectives at the completion of reclamation. The reclamation will be monitored after 2 years and if standards are not achieved, the proponent would be required to remedy the factors contributing to the lack of success. In addition, the BLM may, at the discretion of the AO, require a detailed accelerated reclamation plan.

K.4.2 Exceptions

The following exceptions may be considered on a case-by-case basis:

- In the event there is insufficient AIM data to establish PNCs for an upland site at the time the BLM issues an authorization, the AO may approve an authorization-specific reclamation requirement of at least 70 percent native plant foliar cover with two consecutive growing seasons with self-sustaining upward trend. Self-sustaining upward trend means no fewer than two sample sets, measured at approximately the same time in the growing season during two consecutive growing seasons, which document an increase in plant foliar cover achieved without artificial stimulation, such as fertilizers or irrigation.
- On a case-by-case basis, the AO may approve reclamation plans that include objectives based on moderate departure from PNCs (5th–25th percentile range), provided that cumulatively the objectives

lead to result in site stability and the prevention of unnecessary or undue degradation. This exception is designed to provide increased flexibility for sites that have had a history of disturbance.

- Outlier sites
  - When baseline data demonstrate that pre-disturbance site conditions are at a departure from PNCs, the AO may ask a BLM-led interdisciplinary team to evaluate the site and recommend a site-specific threshold for the indicators in lieu of establishing conditions within PNCs. However, the BLM would grant no exceptions to PNCs to compensate for the loss of topsoil due to poor practices or negligence.
  - Where disturbance occurs or is proposed to streams in valley types or landforms consisting of steep depositional fans or glacial troughs and outwash valleys, which have naturally braided or multi-threaded channels, reclamation should be focused on achieving site-appropriate valley profiles and establishing vegetation on the outer edges of the channel. This situation is expected to be very rare.

Table K-1
Interim Benchmark Objectives for Aquatic AIM

Indicator	Description	Predicted Response to Stress	Units	Min. Value	Max. Value	5th Percentile	25th Percentile	75th Percentile	95th Percentile
Bank Overhead Cover	Average percent overhead cover provided by stream banks (left and right), vegetation, or other objects measured at the scour line of the left and right banks across 11 transects (n=44)	Decrease	%	0	99	23.2	49.5	.	.
Bank Cover and Stability	Percentage of 42 banks both stable (lacking visible signs of active erosions [e.g., slump, slough, and fracture]) and covered (greater than 50% cover provided by perennial vegetation, wood, or mineral substrate > 15 centimeter) (n=35)	Decrease	%	14	100	34	60	.	.
Floodplain Connectivity	The ratio of average floodplain height to average bankfull height taken from the thalweg = (floodplain height + thalweg depth) / (bankfull height + thalweg depth). This is also known as Rosgen's Bank Height Ratio (n=44)	Increase	None	0	1.9	.	.	1.4	1.6
Riffle Habitat	Percentage of riffle habitat based on the length of all riffles divided by the overall length of the sampled stream reach (n=11)	Increase	%	54	84	.	.	74	84

Indicator	Description	Predicted Response to Stress	Units	Min. Value	Max. Value	5th Percentile	25th Percentile	75th Percentile	95th Percentile
Riparian Vegetation Complexity: Understory Woody Cover	Measure of the average vegetative cover provided by woody understory vegetation (0.5–5 meters). Proportional cover was binned into four classes (0.875, 0.575, 0.25, and 0.05) and then averaged across the left and right banks of 11 transects. (n=43)	Decrease	None	0.07	0.77	0.21	0.34	.	.
Riparian Vegetation Complexity: Understory Non-Woody Cover	Measure of the average vegetative cover provided by herbaceous understory vegetation (0.5–5 meters). Proportional cover was binned into four classes (0.875, 0.575, 0.25, and 0.05) and then averaged across the left and right banks of 11 transects. (n=44)	Decrease	None	0	0.27	0	0.02	.	.
Riparian Vegetation Complexity: Ground Woody Cover	Measure of the average vegetative cover provided by woody ground cover vegetation (< 0.5 meters). Proportional cover was binned into four classes (0.875, 0.575, 0.25, and 0.05) and then averaged across the left and right banks of 11 transects. (n=44)	Decrease	None	0	0.81	0.15	0.29	.	.

Indicator	Description	Predicted Response to Stress	Units	Min. Value	Max. Value	5th Percentile	25th Percentile	75th Percentile	95th Percentile
Riparian Vegetation Complexity: Ground Non-Woody Cover	Measure of the average vegetative cover provided by herbaceous ground cover vegetation (0.5–5 meter). Proportional cover was binned into four classes (0.875, 0.575, 0.25, and 0.05) and then averaged across the left and right banks of 11 transects. (n=44)	Decrease	None	0.16	0.72	0.22	0.31		

Appendix L

ANILCA Section 810 Final Evaluation

TABLE OF CONTENTS

Section Page

APPENDIX L. ANILCA SECTION 810 FINAL EVALUATION L-1

- L.1 Subsistence Evaluation Factors L-1
  - L.1.1 Environmental Justice L-2
- L.2 ANILCA Section 810(a) Evaluations and Findings L-3
  - L.2.1 Evaluation and Finding for the Approved RMP L-3
  - L.2.2 Evaluation of the availability of other lands for the purpose sought to be achieved L-5
  - L.2.3 Findings L-5
  - L.2.4 Evaluation and Finding for the Cumulative Case L-5
  - L.2.5 Evaluation of the availability of other lands for the purpose sought to be achieved L-7
  - L.2.6 Findings L-7
- L.3 Notice and hearings L-7
- L.4 Subsistence determinations under ANILCA Section 810(a)(3)(A), (B), and (C) L-8
  - L.4.1 Significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of public lands L-8
  - L.4.2 The Approved RMP will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition L-9
  - L.4.3 Reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions L-9
- L.5 Conclusion L-9
- L.6 References L-9

ACRONYMS AND ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS	Full Phrase
ACEC	areas of critical environmental concern
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
EIS	environmental impact statement
EO	Executive Order
FLPMA	Federal Land Policy and Management Act of 1976
OHV	off-highway vehicle
PLO	Public Land Order
RMP	resource management plan
ROD	record of decision
RNA	research natural area
ROW	right-of-way

Appendix L. ANILCA Section 810 Final Evaluation

L.1 SUBSISTENCE EVALUATION FACTORS

Section 810(a) of the Alaska National Interest Lands Conservation Act (ANILCA), 16 United States Code Section 3120(a), requires that an evaluation of the effect of the action on subsistence uses and needs be completed for any federal determination to "withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands." Public lands are defined by ANILCA Section 102(3) as Federal lands in Alaska, but not those lands with valid land selections of a Native Corporation made under the Alaska Native Claims Settlement Act (ANCSA) or land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act. As such, an evaluation of potential impacts on subsistence under ANILCA Section 810(a) was completed for the Central Yukon Resource Management Plan (RMP)/Final Environmental Impact Statement (EIS). ANILCA requires that this evaluation include findings on the following:

- The effect of use, occupancy, or disposition of public lands on subsistence uses and needs
- The availability of other lands for the purposes sought to be achieved
- Other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes

Three factors were considered when determining if a significant restriction of subsistence uses and needs may result from the proposed action, alternatives, or in the cumulative case, as follows:

- Reduction in the abundance of harvestable resources used for subsistence purposes
- Reduction in the availability of resources used for subsistence caused by alteration of their distribution, migration patterns, or location
- Legal or physical limitations on subsistence users' access to harvestable resources

Each alternative must be analyzed according to these criteria. ANILCA Section 810 also requires that cumulative impacts be analyzed. Cumulative effects are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR 1508.7). The cumulative effects analysis of the ANILCA Section 810 evaluation is referred to as the "cumulative case." This approach helps the reader separate subsistence restrictions that could potentially be caused by activities proposed under the five alternatives from those that could potentially be caused by past, present, and future activities that have occurred or could occur in the surrounding area.

An alternative would significantly restrict subsistence uses if, after consideration of stipulations or protection measures such as required operating procedures, it can be expected to substantially reduce the opportunity to use subsistence resources. Substantial reductions are generally caused by large reductions in resource abundance, a major redistribution of resources, extensive interference with access, or major increases in the use of those resources by non-subsistence users.

If the analysis determines that the proposed action, alternatives, or the cumulative case may significantly restrict subsistence uses, the Bureau of Land Management (BLM) must notify the State of Alaska and appropriate regional and local subsistence advisory committees. The BLM must also conduct ANILCA Section 810 hearings in potentially affected communities.

It is possible that the finding may be revised to "will not significantly restrict subsistence uses" based on changes to alternatives, new information, or new mitigation measures resulting from the hearings. If the significant restriction remains, the BLM may prohibit the action or finalize the evaluation by making the following determinations:

- A significant restriction of subsistence uses would be necessary, consistent with sound management principles for the use of public lands
- The proposed activity would involve the minimal amount of public land necessary to accomplish the purpose of the use, occupancy, or other disposition
- Reasonable steps will be taken to minimize adverse effects upon subsistence uses and resources resulting from such actions (Section 810(a)(3)).

The BLM can then authorize use of the public lands.

L.1.1 Environmental Justice

In addition to ANILCA, Executive Order (EO) 12898, Environmental Justice for Low Income and Minority Populations, calls for an analysis of the effects of federal actions on minority populations with regard to subsistence. Environmental Justice is defined as follows:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development of environmental laws, regulations, and policies (U.S. Environmental Protection Agency).

Fair treatment is defined as follows:

The principle that no group of people, including racial, ethnic, or socioeconomic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and Tribal programs and policies (U.S. Environmental Protection Agency).

EO 12898 Section 4-4, Subsistence Consumption of Fish and Wildlife, requires federal agencies to collect, maintain, and analyze information on the consumption patterns of populations that principally rely on fish and wildlife for subsistence. The EO also requires federal agencies to communicate to the public any risks associated with the consumption patterns from proposed activities. The following were reviewed and comply with EO 12898:

- Description of subsistence use in the Central Yukon RMP/Draft EIS Chapter 3, Affected Environment and Environmental Consequences, and Appendix Q, Subsistence Uses and Resources
- Analyses of the impacts of Alternatives A, B, C1, C2, D, E, and the Cumulative Case in the Central Yukon RMP/Draft EIS Chapter 3, Affected Environment and Environmental Consequences
- Consideration of public comments on the Central Yukon RMP/Draft EIS and feedback received during the ANILCA 810 hearings on the Central Yukon RMP/Draft EIS.

As described in the Central Yukon RMP/Draft EIS, Section 3.5.1, environmental justice populations identified for consideration with this RMP include: Evansville, Rampart, Alatna, Allakaket, Stevens Village, Hughes, Huslia, Ruby, Galena, Tanana, Koyukuk, Nulato, Kaltag, Manley Hot Springs, Minto, Nenana, Venetie, Lake Minchumina, McKinley Park, Ester, Fairbanks, and Anaktuvuk Pass. Non-environmental justice populations identified for analysis in the EIS include Wiseman, Coldfoot, Bettles, Healy, North Pole, Big Delta, Delta Junction.

Subsistence-related impacts are identified and described as appropriate for these communities below. Communities not identified in the analysis below but on the lists above are not subject to subsistence-related impacts associated with the RMP.

L.2 ANILCA SECTION 810(A) EVALUATIONS AND FINDINGS

Chapter 3, Affected Environment and Environmental Consequences, of the Central Yukon RMP/EIS describes the affected environment of the planning area and the potential effects of the Approved RMP on subsistence and subsistence resources. Appendix Q, Subsistence Uses and Resources, in the Final EIS, describes areas and resources important for subsistence and describes individual communities' degree of dependence on fish and wildlife populations. This evaluation uses the above information from the EIS to evaluate potential impacts to subsistence under the Approved RMP pursuant to Section 810(a) of ANILCA.

The Central Yukon RMP/EIS does not authorize specific actions or projects, nor are specific details regarding future proposals for use of public lands in the planning area known at this time. As such, most impacts are described qualitatively in this evaluation. Future authorizations for discretionary use of public lands in the planning area would be subject to site- or activity-specific ANILCA Section 810 evaluations as appropriate, which would identify and address impacts on subsistence in detail. The Central Yukon RMP Record of Decision (ROD) and Approved RMP opens 11,178,000 acres of BLM-administered land to selection and then conveyance as Native allotments pursuant to the Dingell Act. The conveyance of Native allotments is a non-discretionary action and not subject to further ANILCA review.

The evaluation is focused on the communities within the planning area because they have the most potential to be directly and indirectly impacted by land use allocations. The cumulative analysis includes consideration of past, present, and reasonably foreseeable future authorized uses both within and around the planning area and considers impacts to qualified subsistence users residing in northern Alaska.

L.2.1 Evaluation and Finding for the Approved RMP

Evaluation of the effect of use, occupancy, or disposition on subsistence uses and needs

Effects from energy and mineral management decisions

Under the Approved RMP, 3,109,000 acres (71 percent) of the lands identified as subsistence use areas are open to locatable mineral entry, and 1,298,000 acres would remain withdrawn from all locatable mineral entry (29 percent), 392,000 acres (9 percent) are open to fluid leasable minerals, and 4,090,000 acres (93 percent) are open to mineral material sales. Portions of the lands would be closed to development to protect important habitat for subsistence fish and wildlife resources. Significant impacts from energy and mineral management to subsistence resources or resource use are not anticipated; fluid mineral potential in most of the area is very low to low. Areas of fluid mineral potential are limited to a few locations in the planning area, and no development is expected on BLM-managed surface or mineral estate during the life of the RMP. The percent of land open to locatable minerals under Alternative E is nominally greater than under Alternative A (63.4 percent in Alternative E versus 63.2 percent in Alternative A). There is no potential for nonenergy minerals in the Central Yukon RMP (see Appendix N of the Proposed RMP/Final EIS). As such, significant impacts on subsistence resources or resource use would not be anticipated.

Effects from lands, realty, and utility corridor management decisions

The Public Land Order (PLO) 5150 withdrawal remains in place under the Approved RMP. Due to the withdrawals, all of the lands within the Dalton Highway inner and outer corridor lands would continue to meet the definition of public lands in ANILCA. Qualified rural residents would be subject to federal hunting and fishing regulations on these lands and would access subsistence resources using traditional means defined in ANILCA. Access to traditional hunting, fishing, and gathering areas would be maintained. The Approved RMP recommends that the Secretary revoke in part 11,178,000 acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. This would result in land conveyance out of federal administration, though not on a scale likely to cause a significant restriction in federally qualified subsistence uses.

Under the Approved RMP, 639,000 (14 percent) acres of lands identified as subsistence use areas would be designated as right-of-way (ROW) avoidance areas and less than 1 percent would be designated as ROW exclusion. ROW development could cause habitat degradation and fragmentation and increase competition for resources if those ROWs were used to build structures, utilities, or transportation corridors. This may impact moose, caribou, and fish resources as these resources are typically the most heavily harvested resources by communities in the planning area; however, impacts on the abundance or availability of fish, wildlife, or other subsistence resources on BLM-managed lands from ROW development on BLM-managed lands in the planning areas would be negligible. Existing lands, realty, and utility corridor management do not impact the abundance or availability of subsistence resources.

Effects from recreation and visitor services management

The Approved RMP increases the targeted recreation opportunities available in the planning area. Most recreation and accompanying visitor services would be focused along the Dalton Highway. In addition, 201,000 acres (31 percent) of the subsistence use areas would be managed as the Dalton Corridor Backcountry Conservation Area. This area, though potentially attracting more recreational users, would be managed to retain resource habitat in its current state.

Impacts of recreation and visitor services management on abundance or availability of fish, wildlife, or other subsistence resources would be minor. Access to important subsistence use areas would not be impeded or prohibited by recreation and visitor services management.

Effects from travel and transportation management

Access to subsistence resources could be impacted by summer off-highway vehicle (OHV) restrictions in the Galena Mountain and Ray Mountains Core Caribou Ranges and by summer closures which would prohibit the use of OHVs in the Toolik Lake ACEC during these time frames. Legal restrictions would limit the ability to access portions of these subsistence use areas during the summer.

These areas overlap subsistence use areas for residents of Bettles, Ruby, Ambler, Tanana, Hughes, Allakaket, Alatna, Anaktuvuk Pass, Wiseman, and Coldfoot. Access to these areas is predominately by river during summer or via snowmachine in the winter (Brown et al. 2016, Holen et al. 2012). Overland access via OHV in summer and fall is uncommon and access to the majority of these communities' subsistence resources would not be restricted.

Effects from ACEC management decisions

Under the Approved RMP, 1,172,000 acres (27 percent) of community subsistence areas would be managed as ACECs or research natural areas. This alternative provided the second largest geographic area of ACECs out of the range of alternatives considered in the Central Yukon Proposed RMP/Draft EIS. Protection of habitat would benefit fish, wildlife and vegetation harvested by subsistence users.

Access to subsistence resources could be affected by seasonal limitations on OHV travel under management actions for specific ACECs. OHV restrictions are expected to have a minor effect on subsistence. Harvest of timber and woody vegetation would be prohibited in the Kanuti Hot Springs and the Sukakpak/Snowden ACECs. These areas are not important subsistence vegetation harvest areas. Impacts to vegetation harvest would not occur.

L.2.2 Evaluation of the availability of other lands for the purpose sought to be achieved

Other lands have been considered and would not meet the purpose and need of this resource management planning process by addressing management needs and opportunities for the planning area, as described in Section 1.2 of the Proposed RMP/Final EIS. This includes management decisions related to energy and minerals; recreation and visitor services; travel and transportation management; designation and management of ACECs; decisions related to lands, realty, and utility corridor management; and the using of other lands for the recommendation that the Secretary revoke in part ANCSA 17(d)(1) PLOs to allow for selection of Native allotments by Alaska Native Vietnam-era veterans under the Dingell Act. Energy and mineral management decisions; lands, realty, and utility corridor management decisions; recreation and visitor services management, travel and transportation management; and ACEC management decisions are BLM decisions and not under the authority of other agencies or entities. Other BLM-managed lands in Alaska are being managed under existing RMPs or are currently undergoing new planning processes. The BLM does not have the authority to make or implement land management planning decisions on federal land managed by other agencies, State land, Native corporation land, Native allotments, or private land.

L.2.3 Findings

The Approved RMP would not result in a significant restriction in subsistence uses and would not have a disproportionate negative impact on environmental justice communities. A positive determination pursuant to ANILCA Section 810 is not required.

L.2.4 Evaluation and Finding for the Cumulative Case

Evaluation of the effect of use, occupancy, or disposition on subsistence uses and needs

Effects from energy and mineral management decisions

Locatable and saleable mining is anticipated to continue in the planning area over the life of the plan. The extent of mining activity for locatable minerals is difficult to predict because exploration and development is dependent on precious metal prices. Development is most likely to occur in high and moderate potential areas near road systems. Planning area communities with the greatest potential to be impacted would include those with subsistence use areas in the Dalton Highway utility corridor and downstream communities. Mineral material development will continue to support road and ROW maintenance needs. New projects requiring mineral materials would likely use existing pits where economically feasible. As with locatable minerals, mining is expected to occur along existing road systems. ROW projects located outside the Dalton Highway would require opening new mineral material sites. Cumulative impacts on fisheries and wildlife resources are described in the Proposed RMP/Final EIS, Chapter 3, Section 3.2.7 and Section 3.2.6. Additional mining activity could impact fish and wildlife through direct habitat loss, displacement, and increased human activity, including hunting and trapping. Potential rare earth mining in the Ray Mountains region could impact the Ray Mountains caribou herd range use. Current and future mining activity may lead to increased degradation of habitat and water quality through run-off, changes in nutrient and macroinvertebrate abundance and reduced spawning/rearing habitat for fish.

An increase in mining activities on non-BLM-managed lands or adjacent to the planning area could contribute to cumulative impacts on subsistence resources and users to varying degrees. The Ambler Road Supplemental EIS ANILCA Section 810 Subsistence Evaluation found that the reasonably foreseeable future action of mine development in the Ambler Mining District could negatively impact subsistence resources. This included direct and indirect effects from mining on fish, vegetation, and wildlife which may result in a significant restriction to subsistence resources and may significantly reduce or limit the abundance, availability, or access to subsistence resources. The environmental impacts on the Central Yukon RMP decision area are less under the cumulative case for the Approved RMP than analyzed under the Proposed RMP/Final EIS because the BLM has since denied the ROW application for the Ambler Road in a 2024 Supplemental EIS and ROD. However, infrastructure development within the potential Ambler utility corridor and the Dalton utility corridor is still foreseeable within the life of the plan.

Effects from lands, realty, and utility corridor management decisions

Current and future lands, realty, and utility corridor management decisions that could impact subsistence users and resources in the planning area include development of additional utility or transportation corridors and the recommended revocation of PLO 5150.

Access to subsistence resources would remain intact due to the retention of PLO 5150 under the Approved RMP.

Development of infrastructure within authorized ROWs in the planning area are expected to continue or increase over the life of the plan. Development is most likely to occur in designated ROWs and in areas with energy, locatable, and mineral material development. Cumulative impacts on fisheries and wildlife resources are described in the Proposed RMP/Final EIS, Chapter 3, Section 3.2.7 and Section 3.2.6. These include habitat loss, fragmentation, and degradation, and disturbance of or direct mortality to resources. The Ambler Road ROW intersects the proposed hunting areas of Alatna, Allakaket, Anaktuvuk Pass, Bettles, Coldfoot, Evansville, and Wiseman on non-BLM-managed lands. The ROW also crosses subsistence fishing areas of Evansville and Bettles on non-BLM-managed lands. The Ambler Road Supplemental EIS ANILCA Section 810 Subsistence Evaluation found that road construction and operations may significantly restrict subsistence uses for Alatna, Allakaket, Anaktuvuk Pass, Bettles, Coldfoot, Evansville, and Wiseman due to a potential decrease in abundance and availability of caribou, fish, and vegetation. The environmental impacts on the Central Yukon RMP decision area are less under the cumulative case for the Approved RMP than analyzed under the Proposed RMP/Final EIS because the BLM has since denied the ROW application for the Ambler Road in a 2024 Supplemental EIS and ROD. However, infrastructure development within the potential Ambler utility corridor and the Dalton utility corridor is still foreseeable within the life of the plan.

Effects from recreation and visitor services management

The demand for recreation opportunities is expected to increase during the life of the plan. Recreational use will continue to increase along established routes, particularly the Dalton Highway. Demand for remote recreational access will increase to a lesser extent. An increase in recreational activities in or adjacent to the planning area would contribute to cumulative impacts on subsistence resources and users to varying degrees. Planning area communities with the greatest potential to be impacted would include those with subsistence use areas in the Dalton Utility Corridor. Wiseman and Coldfoot would be most affected since they are road accessible.

Given past and current recreation management and future management scenarios presented in this plan, their location in relation to subsistence use, and management actions and mitigation measures proposed in this plan, recreation management is not expected to substantially reduce the opportunity to use subsistence resources. Impacts from recreation and visitor services management would not significantly reduce or limit the abundance, availability, or access to subsistence resources for communities assessed in this evaluation.

Effects from travel and transportation management

Current and future travel and transportation actions would primarily consist of highway (Elliott and Dalton) and infrastructure improvements in and around the planning area. These activities would not significantly reduce or limit the abundance, availability, or access to subsistence resources.

Effects from ACEC management decisions

All ACECs and RNAs include the requirement that surface-disturbing activities associated with mineral exploration and development in ACECs be conducted under an approved plan of operations (43 CFR, Part 3809). This requirement allows additional assessment of potential impacts on resources, some of which may be harvested by subsistence users. Alternative E, with 3,601,000 acres under ACEC or RNA management, would have the second most acres with these protections.

L.2.5 Evaluation of the availability of other lands for the purpose sought to be achieved

See **Section L.2.2.**

L.2.6 Findings

The cumulative case, when taken in conjunction with the Approved RMP, accounts for the potential for significant mineral development on State and private lands as well as access to those mineral areas. It would not significantly restrict subsistence uses or have a disproportionate negative impact on the communities of Arctic Village, Galena, Hughes, Huslia, Kaltag, Koyukuk, Lake Minchumina, Manley Hot Springs, Minto, Nenana, Nuiqsut, Nulato, Rampart, Ruby, Stevens Village, Tanana, and Venetie. The development of known deposits in the Ambler Mining District, Wiseman East and West deposits, and the Ray Mountains could significantly restrict subsistence uses and have a disproportionate negative impact on the environmental justice communities of Alatna, Allakaket, Anaktuvuk Pass, Evansville, Hughes, and Huslia; the development could also significantly restrict subsistence uses for the communities of Bettles, Coldfoot, and Wiseman. These findings are based on significant reduction or limiting of the abundance, availability, or access to subsistence resources related to cumulative effects of energy and mineral management decisions and lands, realty, and utility corridor management decisions as described in **Section L.2.4** and in the Proposed RMP/Final EIS Appendix Q, Subsistence Uses and Resources, pages Q-89 through Q-92.

L.3 NOTICE AND HEARINGS

ANILCA Section 810(a) provides that no "withdrawal, reservation, lease, permit, or other use, occupancy, or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Section 810(a)(1) and (2). The BLM provided notice in the Federal Register that it made positive findings pursuant to ANILCA Section 810 that Alternatives B, C1, C2, D, and the Cumulative Case presented in the Central Yukon RMP/Draft EIS meet the "may significantly restrict" threshold. Public hearings were held virtually via Zoom on January 28, February 4, and February 9, 2021. The hearings provided an opportunity for testimony to residents of the potentially affected communities of Alatna, Allakaket, Anaktuvuk Pass, Bettles, Coldfoot, Evansville, and Wiseman, as well as other communities throughout the planning area. Notices of these hearings were provided in the Federal Register.

Rural residents that participated in the hearings talked about the degree to which they depend on resources in the region and emphasized the importance of working with federally recognized Tribes. They described the current status of game populations and expressed the need for their communities to have access to safe and reliable food sources. Residents voiced concerns that resource development could contaminate rivers and impact subsistence fish resources. Participants expressed concern regarding the virtual format of the public meetings and hearings and the time allotted for speaking. Multiple participants voiced opposition to the recommendation to lift PLO 5150 under the proposed alternatives that included this recommendation. They described the impact that this recommendation would have on their ability to access traditional hunting, fishing, and gathering areas. They provided detailed examples of how changes in legal access to traditional lands would impact their subsistence practices. Much of this discussion and testimony during the hearings confirmed the impacts documented in the Central Yukon RMP/Draft EIS.

Feedback received during the ANILCA 810 hearings, along with consideration of public comments, and further consideration of impacts to environmental justice communities documented in the EIS (Section 3.5.1) led to modifications of findings for some alternatives to more accurately depict impacts from RMP alternatives in this analysis.

L.4 SUBSISTENCE DETERMINATIONS UNDER ANILCA SECTION 810(A)(3)(A), (B), AND (C)

ANILCA Section 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Section 810(a)(1) and (2),and makes the three determinations required by ANILCA Section 810(a)(3). The three determinations that must be made are: 1) that such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands; 2) that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition; and, 3) that reasonable steps will be taken to minimize adverse impacts to subsistence uses and resources resulting from such actions [16 U.S.C. 3120(a)(3)(A), (B), and (C)].

The determinations below satisfy the requirements of ANILCA Section 810(a)(3)(A), (B), and (C).

L.4.1 Significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of public lands

As defined by the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, public lands are those federally owned lands and interest in lands (e.g., federally owned mineral estate) that are administered by the Secretary of the Interior, specifically through BLM. This includes lands selected, but not yet conveyed, to the State of Alaska and Native corporations and villages.

The Approved RMP meets BLM statutory requirements for a land use plan as mandated by Section 202 of FLPMA, which specifies the need for comprehensive land use plans consistent with multiple use and sustained yield objectives. The EIS fulfills the NEPA requirements to disclose and address environmental impacts of proposed major federal actions through a process that included public participation, cooperation with other agencies, and consultation with the Tribes and Native corporations.

After considering a broad range of alternatives, a proposed plan was developed that fulfills the multiple use mission of BLM. Through the completion of the RMP/EIS, the BLM proposes to provide a comprehensive land use plan that will guide management of the public lands and interests administered by the Central Yukon Field Office.

The BLM has selected Alternative E as the Proposed RMP for the RMP. BLM has determined that the significant restriction that may occur under the Proposed RMP, when considered together with all the possible impacts of the cumulative case, is necessary, consistent with the sound management principles for the use of these public lands, and necessary for BLM to fulfill the management goals for the planning area as guided by the statutory directives in FLPMA and other applicable laws.

L.4.2 The Approved RMP will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition

BLM has determined that the Approved RMP involves the minimal amount of public lands necessary to accomplish the purpose of the proposed action: the creation of an inclusive, comprehensive plan that provides clear direction to both BLM and the public on how BLM lands and resources in Central Yukon planning area should be managed.

L.4.3 Reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions

When BLM began its NEPA scoping process for the Central Yukon RMP, it internally identified subsistence use as one of the major issues to be addressed based on scoping comments, consultation, and input from public meetings. This was reinforced by comments received on the Draft RMP/EIS. The results of public scoping meetings, consultation with tribal governments, and meetings and correspondence with local governments were used to craft the Approved RMP. In addition, BLM took into consideration comments from rural villages and individuals during the ANILCA 810 subsistence hearings. This information contributed to the development of Alternative E, which would retain PLO 5150 lands in federal ownership and maintain subsistence users' legal access to important resources. Alternative E was adopted as the Approved RMP and was recognized as a clear and reasonable step that would minimize impacts to subsistence use.

Given these steps, BLM has determined that the Approved RMP includes reasonable steps to minimize adverse impacts on subsistence uses and resources that may result from the Approved RMP.

L.5 CONCLUSION

The BLM has determined that, after consideration of all alternatives, subsistence evaluations, and public hearings, such a significant restriction of subsistence uses as may occur under the cumulative case is necessary and consistent with sound management principles for the utilization of this land, and that the Approved RMP involves the minimal amount of public lands necessary to fulfill its purpose. Reasonable steps have been taken to minimize the adverse impacts upon subsistence uses and resources arising from this action.

L.6 REFERENCES

BLM (U.S. Department of the Interior, Bureau of Land Management). 2024. Central Yukon Proposed Resource Management Plan and Final EIS. BLM Fairbanks Office, Alaska. DOI-BLM-AK-F030-2013-0062-RMP-EIS. Internet website: https://eplanning.blm.gov/eplanning-ui/project/35315/570.

Brown, C. L., N. M. Braem, J. L. Kostick, A. Trainor, L. J. Slayton, D. M. Runfola, E. H. Mikow, H. Ikuta, C. R. McDevitt, J. Park, and J. J. Simon. 2016. Harvests and uses of wild resources of 4 Interior Alaska communities and 3 Arctic Alaska communities. Alaska Department of Fish and Game, Division of Subsistence. Technical Paper No. 426. Fairbanks, Alaska.

Holen, D., S. M. Hazell, and D. S. Kostner, editors. 2012. Subsistence harvests and uses of wild resources by communities in the eastern Interior of Alaska, 2011. Alaska Department of Fish and Game, Division of Subsistence. Technical Paper No. 372. Anchorage, Alaska.

Stevens Village Council. 1991. A Comprehensive Land Use Plan For The Traditional Lands of Stevens Village. Internet website: commerce.alaska.gov/dcra/admin/Download/GetFile/?documentUID=337ddcbe-3bb4-4443-af76-610d6a9b8489&isPdf=true

Appendix M

Areas of Critical Environmental Concern

This page intentionally left blank.

TABLE OF CONTENTS

Section Page

APPENDIX M. AREAS OF CRITICAL ENVIRONMENTAL CONCERN M-1

M.1 Current Conditions M-2
M.2 Approved RMP M-3
M.3 Direct and Indirect Impacts M-7
M.4 Methods and Assumptions M-7
M.5 Impacts under the Approved RMP M-8
M.6 Accomplishment Creek M-8
M.7 Alatna River M-8
M.8 Arms Lake RNA M-9
M.9 Galbraith Lake M-9
M.10 Galena Mountain M-10
M.11 Hogatza River Tributaries M-10
M.12 Huslia River Tributaries M-11
M.13 Indian River M-12
M.14 Ishtalitna Creek Hot Springs RNA M-12
M.15 Jim River M-13
M.16 Kanuti Hot Springs M-14
M.17 Klikhtentotzna Creek M-14
M.18 Lake Todatonten Pingos RNA M-15
M.19 McQuesten Creek RNA M-15
M.20 Mentanontli River/Lake Todatonten M-15
M.21 Midnight Dome/Kalhabuk M-16
M.22 Nugget Creek M-16
M.23 Poss Mountain M-16
M.24 Redlands Lake RNA M-16
M.25 Sethkokna River M-17
M.26 South Fork Koyukuk River M-18
M.27 South Todatonten Summit RNA M-18
M.28 Spooky Valley RNA M-19
M.29 Sukakpak/Snowden Mountain M-19
M.30 Sulukna River M-19
M.31 Toolik Lake RNA M-20
M.32 Tozitna, Tozitna River, and Tozitna Subunits North and South M-20
M.33 Upper Kanuti River M-21
M.34 Upper Teedriinjik (Chandalar) River M-22
M.35 West Fork Atigun River M-22
M.36 Wheeler Creek M-23
M.37 Conclusion M-23
M.38 Cumulative Impacts M-23
M.39 References M-24

TABLES

Page

M-1 Summary of ACECs Not Designated M-4
M-2 Summary Evaluation of Potential ACECs and their Relevant and Important Values M-5

ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	area of critical environmental concern
ANCSA	Alaska Native Claims Settlement Act
ANVLAP	Alaska Native Vietnam-Era Veterans Land Allotment Program
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CSU	conservation system unit
EA	environmental assessment
EIS	environmental impact statement
GMH	Galena Mountain Herd
NEPA	National Environmental Policy Act
NSO	no surface occupancy
OHV	off-highway vehicle
PLO	Public Land Order
R&I	relevant and important
RMH	Ray Mountains Herd
RMP	resource management plan
RNA	research natural area
ROW	right-of-way
VRM	visual resource management

Appendix M. Areas of Critical Environmental Concern

Areas of critical environmental concern (ACECs) are defined in the Federal Land Policy and Management Act, Section 103(a), as an area on Bureau of Land Management (BLM) lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values; fish and wildlife resources; or other natural systems or processes, or to protect life and ensure safety from natural hazards. The BLM regulations for implementing the ACEC provisions of the Federal Land Policy and Management Act are found in 43 Code of Federal Regulations (CFR) 1610.7-2(b).

A research natural area (RNA) is "an area that is established and maintained for the primary purpose of research and education" (43 CFR 8223). The land must have at least one of the following characteristics:

- A typical representation of a common plant or animal association
- An unusual plant or animal association
- A threatened or endangered plant or animal species
- A typical representation of common geologic, soil, or water features, outstanding or unusual geologic, soil, or water features
- A sufficient number and size to adequately provide for scientific study, research, and demonstration purposes

Special management attention refers to management prescriptions developed during preparation of a resource management plan (RMP) or RMP amendment expressly to protect the important and relevant values of an area from the potential effects of actions the RMP permits, including proposed actions deemed to be in conformance with the terms, conditions, and decisions of the RMP (BLM Manual 1613, Areas of Critical Environmental Concern [BLM 1988]). Such management measures would not be necessary or prescribed if the critical and important features were not present.

To be designated as an ACEC, the area must meet criteria of relevance and importance found in 43 CFR 1610-7-2(a)(b), and as defined in the BLM Manual 1613, Areas of Critical Environmental Concern (BLM 1988). To be eligible for designation as an ACEC, an area must meet criteria for both relevance and importance. An ACEC possesses significant historic, cultural, or scenic values; fish or wildlife resources, including habitat, communities, or species; natural processes or systems; or natural hazards. In addition, the significance of these values and resources must be substantial to satisfy the importance criteria.

ACECs differ from some other special management designations in that designation by itself does not automatically prohibit or restrict other uses in the area. The special management attention is designed specifically for the relevant and important (R&I) values; therefore, it varies from area to area. Restrictions that arise from an ACEC designation are determined at the time the designation is made, and they are designed to protect the values or serve the purposes for which the designation was made.

Goals, standards, and objectives for each proposed ACEC will be identified, as well as general management practices and uses, including necessary constraints and mitigation measures. The RMP will identify a reasonable range of alternatives that will include current management for existing ACECs, as well as management for proposed ACECs. In addition, ACECs are protected by the provisions of 43 CFR 3809.11(c)(3), which require an approved plan of operations for activities resulting in surface disturbance greater than casual use under the mining laws.

In 2023, the BLM published an Instruction Memorandum, Clarification and Interim Guidance for Consideration of Areas of Critical Environmental Concern Designations in Resource Management Plans and Amendments (IM 2023-013). This Instruction Memorandum states that the BLM should maintain an updated inventory of ACECs, evaluate them for R&I, evaluate the need for special management, and publish a notification in the Federal Register when an RMP involves ACECs. The RMP followed this guidance, as outlined below.

The BLM inventoried the decision area for information and data on the relevance and importance of values, resources, systems or processes, and natural hazards in 2015 with the report Areas of Critical Environmental Concern Report on the Application and Relevance Criteria (BLM 2015). The BLM reviewed the potential ACECs during the review of public comments on the Draft RMP in 2021. The BLM again reviewed the potential ACECs during the writing of the Proposed RMP/Final Environmental Impact Statement (EIS) and during the review of protests and the Governor's consistency review.

The BLM reviewed potential ACECs for relevance and importance, to the extent consistent with applicable laws and regulations, including landscape intactness, climate resiliency, habitat connectivity, or opportunities for conservation or restoration, or substantial significance to Tribes or Alaska Native Corporations, as defined in the Alaska National Interest Lands Conservation Act, in a way that may support Tribal co-stewardship or traditional and customary uses.

The BLM evaluated the need for special management attention to protect relevant and important values when considering whether to designate an area as an ACEC (MS-1613.11). When an ACEC is not designated in the Proposed RMP, this appendix documents how the relevant and important values are otherwise protected. Appendix T of the Proposed RMP/Final EIS also documents this.

The BLM notified the public about publication of the Draft RMP/EIS in the Federal Register on December 11, 2020. The BLM notified the public about publication of the Proposed RMP/Final EIS in the Federal Register on April 26, 2024.

M.1 CURRENT CONDITIONS

The BLM currently manages 18 ACECs in the planning area, which collectively contain 1,647,000 acres. The planning area also contains an additional six ACECs that are designated as RNAs, which collectively contain 104,000 acres; these areas are referred to as ACEC/RNAs. ACECs and ACEC/RNAs are herein collectively referred to as "ACECs." Additional information is available in Section 2.3.1, Areas of Critical Environmental Concern, at: https://eplanning.blm.gov/public_projects/lup/35315/66005/71748/2015-11-24_CYRMP_ACEC-Rpt_final_508_reduced.pdf. These ACECs were reevaluated as part of the RMP revision process to determine whether the R&I values of each ACEC were still present and that they required continued management attention, whether threats of irreparable damage to the values had been identified, and whether current management is sufficient to protect the values.

In accordance with the BLM Manual 1613, Areas of Critical Environmental Concern (BLM 1988), the Central Yukon Field Office interdisciplinary team reviewed all the BLM-managed lands in the planning area, including existing ACECs, to determine whether any areas should be considered for designation as ACECs. The BLM review included both internal and external nominations, as well as areas identified through inventory and monitoring, and adjacent designations of other federal and state agencies. Forty-six areas were nominated for special designation as ACECs. The results of the evaluation were used in this analysis, and they are described in the Areas of Critical Environmental Concern Report on the Application and Relevance Criteria (BLM 2015). Those ACECs for which nominated values were determined to be both R&I are referred to as "potential ACECs" and they are considered for designation. In some cases, potential ACECs encompass existing ACECs. As shown in **Table M-2**, 31 areas encompassing approximately 4,253,000 acres were determined to be potential ACECs. The BLM conducted a comprehensive evaluation of impacts on undesignated potential ACECs and the BLM's ability to protect R&I values from proposed management of other resources and resource uses.

Changes to potential ACECs and R&I values could occur as a result of climate change. Specifically, climate change could affect potential ACECs' various R&I values namely: soil, water, fish/riparian, wildlife, geologic, and vegetation values. General warming of the Arctic could result in increased erosion rates and thawing of permafrost affecting soil, geologic, and vegetation R&I values. Additionally, the retreat of Arctic Sea ice; the melting of glaciers; and decreased snowpack caused by climate change also could result in depleted water resources, degrading water and vegetation R&I values. These impacts from climate change also could degrade or destroy wildlife habitat, adversely affecting wildlife and special status species R&I values. Furthermore, a warming climate is likely to change the fire regime, potentially changing the type and extent of wildlife habitat, resulting in the degradation of soils, vegetation, and wildlife habitat throughout the Arctic (Markon et al. 2018).

M.2 APPROVED RMP

The Approved RMP was developed after considering public comments on the Draft RMP/ EIS, internal BLM discussions, cooperating agency input, and protests on the Proposed RMP/Final EIS.

ACECs proposed for designation in Alternative E follow watershed boundaries for fisheries-based ACECs. The allocations associated with these ACECs consider the smallest area necessary to protect the R&I values, applying special management within defined buffers to protect 100-year floodplains, where such management is warranted.

Twenty-one ACECs or RNAs (approximately 3,611,000 acres) would be designated. Management to protect R&I values would be less restrictive for resource uses, depending on the ACEC. Under the Approved RMP, the BLM did not designate 10 proposed ACECs because special management attention is not required to protect the potential ACEC. As explained below, standard or routine management prescriptions in the RMP are sufficient to protect the R&I values from risks or threats of damage or degradation. This appendix includes the not designated ACECs to document why standard or routine management prescriptions in the RMP are sufficient.

ACECs are not CSUs; rather, they are a designation unique to the BLM that arise from FLPMA. ACECs are unique in that they allow for a wide variety of uses while addressing important resource concerns through carefully tailored management approaches that are informed by public and stakeholder input. While the Central Yukon RMP designates ACECs that include ROW avoidance and exclusion areas in order to address potential impacts on important resource values, ANILCA Section 1323(b) states that, notwithstanding any other provisions of law, and subject to terms and conditions prescribed by the Secretary of the Interior, the Secretary shall provide access to non-federally owned land surrounded by public lands managed by the Secretary under FLPMA (43 U.S.C. 1701-82), provided that such owner comply with rules and regulations applicable to access across public lands. The BLM appreciates the economic and mineral potential of selected and conveyed ANCSA and State lands within the planning area (e.g., the East and West Wiseman Blocks owned by Doyon, Limited) and will work diligently with the State and ANCSA Corporations as the Secretary deems adequate to secure to the owner the reasonable use and enjoyment thereof.

Table M-1
Summary of ACECs Not Designated

Potential ACEC	Approved RMP ACECs Count	Acres
Proposed ACEC not designated	10	639,000
Existing ACEC not designated	10	639,000
ACEC partially designated (Acres of partial ACECs not designated)	6	701,000

Table M-2
Summary Evaluation of Potential ACECs and their Relevant and Important Values

#	Potential ACEC (total potential acres)	Alt E	Soil	Water	Geologic	Fish/ Riparian	Wildlife	Vegetation	Special Species Status	Cultural	Scenic
1	Accomplishment Creek (41,000)	41,000	Yes	Yes	.	Yes	.	.	.	.	.
2	Alatna River (5,000)	5,000	Yes	Yes	.	Yes	.	.	.	.	.
3	Arms Lake RNA (11,000)	0	Yes	.	.	.	.	Yes	.	.	.
4	Galbraith Lake (53,000)	53,000	.	.	.	.	Yes	.	.	Yes	Yes
5	Galena Mountain (75,000)	0	.	.	.	.	Yes	.	.	.	.
6	Hogatza River Tributaries (221,000)	221,000	Yes	Yes	.	Yes	.	.	.	.	.
7	Huslia River (73,000)	73,000	Yes	Yes	.	Yes	.	.	.	.	.
8	Indian River (175,000)	173,000	Yes	Yes	.	Yes	.	.	.	.	.
9	Ishtalitna Creek Hot Springs RNA (1,000)	0	Yes	Yes	.	.	.	Yes	.	.	.
10	Jim River (304,000)	303,000	Yes	Yes	.	Yes	Yes	.	.	Yes	Yes
11	Kanuti Hot Springs (160)	0	Yes	Yes	.		.	.	.	.	.
12	Klikhtentotzna Creek (108,000)	108,000	Yes	Yes	.	Yes	.		.	.	.
13	Lake Todatonten Pingos RNA (1,000)	0	Yes	Yes	.	.	.	Yes	.	.	.
14	McQuesten Creek RNA (4,000)	0	Yes	Yes	.	.	.	Yes	.	.	.
15	Mentanontli River/Lake Todatonten (20,000)	20,000	.	.	.	Yes		.	.	.	.
16	Midnight Dome/Kalhabuk (10,000)	10,000	Yes	.	.	.	Yes	.	.	.	.
17	Nugget Creek (3,000)	3,000	Yes	.	.	.	Yes	.	.	.	.
18	Poss Mountain (25,000)	25,000	Yes	.	.	.	Yes	.	.	.	.
19	Redlands Lake RNA (4,000)	0	Yes	.	.	.	.	Yes	.	.	.
20	Sethkokna River (299,000)	299,000	Yes	Yes	.	Yes	.	.	.	.	.
21	South Fork Koyukuk River (415,000)	415,000	Yes	Yes	.	Yes	.	.	.	.	.

#	Potential ACEC (total potential acres)	Alt E	Soil	Water	Geologic	Fish/ Riparian	Wildlife	Vegetation	Special Species Status	Cultural	Scenic
22	South Todatonten Summit RNA (1,000)	0	Yes	Yes	.	.	.	Yes	.	.	.
23	Spooky Valley RNA (10,000)	0	.	.	.	.	Yes	Yes	.	.	.
24	Snowden Mountain (51,000)	50,000	Yes	.	.	.	Yes	.	.	.	.
	Sukakpak Mountain (3,000)	0	.	.	.	.	Yes	.	.	.	.
	Sukakpak Mountain/ Snowden Mountain (124,000)	0	.	.	Yes	.	Yes	.	.	.	Yes
25	Sulukna River (398,000)	398,000	Yes	Yes	.	Yes	Yes			.	.
26	Toolik RNA (106,000)	106,000	.	.	.	.	.	Yes	Yes	.	.
27	Tozitna (1,043,000)	835,000	Yes	Yes	.	Yes	Yes	.	.	.	.
	Tozitna River (842,000)	0	Yes	Yes	.	Yes		.	.	.	.
	Tozitna Subunits North and South (192,000)	0	Yes	Yes	.	Yes	Yes	.	.	.	.
28	Upper Kanuti River (50,000)	0	.	.	.	.	Yes	.	.	Yes	.
29	Upper Teedriinjik (Chandalar) River (295,000)	295,000	Yes	Yes	.	Yes	.	.		.	.
30	West Fork Atigun River (34,000)	33,000	Yes	.	.	.	Yes	.	.	.	.
31	Wheeler Creek (145,000)	145,000	Yes	Yes	.	Yes	.	.	.	.	.

Source: BLM 2015; BLM GIS 2017

Note: Each "•" above indicates that a R&I value was not identified for that potential ACEC.

M.3 DIRECT AND INDIRECT IMPACTS

Direct impacts on potential ACECs are those that either impair or enhance the R&I values for which the potential ACEC was proposed for designation. As such, this analysis focuses on relevance and importance criteria for each potential ACEC and impacts on these values from either the special management derived from ACEC designation or, where an ACEC is not proposed for designation, the management actions for other resources. All impacts discussed are direct impacts, though some may not occur immediately after implementation of management actions.

The effects of climate change described in the affected environment above could influence the rate or degree of the potential direct and indirect impacts.

The mining regulations also require that within ACECs, even exploration level activities are required to be authorized under a full Plan of Operations, which entails full National Environmental Policy Act (NEPA) review and more opportunities to avoid or minimize impacts to R&I values.

M.4 METHODS AND ASSUMPTIONS

The analysis area used to analyze impacts on ACECs includes each ACEC within the Central Yukon RMP decision area. Impacts identified for ACECs are specific to the area and they are based on the impact that management actions would have on the R&I values of an ACEC.

Indicators

The indicator of impacts on potential ACECs is the following: management actions that would fail to "prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards" (BLM 1988).

Assumptions

This analysis assumes the following:

- Although management actions for most resources and resource uses could have decision area-wide application, ACEC management prescriptions apply only to those lands in each specific ACEC.
- Any management actions affecting less than 1,000 acres were not evaluated in this analysis given the margin of error for the geographic information system data.
- ACEC designation provides protection and focused management for relevant values beyond that provided through general management of the parent resource (e.g., the cultural resource ACECs will receive greater recognition and protection than the general management action regarding cultural resources).
- Authorized activities are assumed to have mitigations proposed so as not to impair the R&I values for which an ACEC is designated. The exception is locatable minerals; until withdrawn from mineral entry, a mining claim can be filed, and subsequent mining could affect R&I values of the ACEC. Specific impacts on R&I values would depend on the type of mineral entry activity and the effectiveness of subsequent reclamation, and the mineral entry's interaction (both spatially and temporally) with that value.
- Impacts resulting from locatable minerals would be subject to 43 CFR 3809 intended to (1) prevent unnecessary or undue degradation of the land and reclaimed disturbed areas and (2) provide for maximum possible coordination with state agencies to avoid duplication and to ensure that operators prevent unnecessary or undue degradation of public lands.

M.5 IMPACTS UNDER THE APPROVED RMP

Designated ACECs are those acres of potential ACECs that would be designated under the Approved RMP, while undesignated ACECs are those acres of potential ACECs that would not be designated. Where ACECs are proposed for designation, special management for ACECs provides a more focused approach to protecting R&I values; therefore, ACEC designation would be the most protective of R&I values. Where ACECs are not proposed for designation, protection of R&I values relies on the management under other resources or resource uses and management requirements under law, policy, and regulation. Incidental protections would usually be in a more generalized manner.

In general, management actions that protect resources—such as: improvements in water quality and quantity, surface disturbance restrictions, management for desired plant communities and habitats, travel restrictions and closures, and recreation restrictions—would help maintain and improve R&I values within undesignated ACECs. Likewise, management actions that create the potential for resource degradation—such as mineral and infrastructure development—could lead to impacts on R&I values within undesignated ACECs. However, implementing various restrictions, policies, stipulations, and best management practices could help reduce these impacts on R&I values.

This section discusses impacts on undesignated potential ACECs and the BLM's ability to protect R&I values from proposed management of other resources and resource uses.

M.6 ACCOMPLISHMENT CREEK

The entire potential ACEC (41,000 acres) would be designated to protect crucial Dolly Varden trout overwintering habitat resulting in protection of R&I values. The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would help protect R&I values within this designated ACEC and reduce threats to R&I values.

All 41,000 acres are encumbered under Public Land Order (PLO) 5150, of which 7,000 acres (17 percent of the area) would continue to be withdrawn from locatable mineral entry and fluid mineral leasing. This would help protect R&I values by prohibiting surface-disturbing activities on these acres.

Furthermore, the entirety of the ACEC would be closed to mineral material sales and no surface occupancy (NSO) for fluid minerals. This would protect habitat from surface-disturbing activities associated with fluid minerals development. The R&I values in open areas could be degraded due to impacts from infrastructure development and surface disturbance associated with mineral development, including destruction of soils and fish habitat; erosion that could degrade aquatic habitats; and contamination of surface water from wastewater spills and runoff.

M.7 ALATNA RIVER

The entire potential ACEC (5,000 acres) would be designated to protect crucial whitefish spawning habitat, supporting the main subsistence fishery resources for villages in the Upper Koyukuk River. This would result in the protection of R&I values.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of Alaska Native Claims Settlement Act of 1971 (ANCSA) 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The Alaska Native Vietnam-Era Veterans Land Allotment Program (ANVLAP) Environmental Assessment (EA) (DOI-BLM-AK-0000-2021-0005-EA) described and analyzed potential impacts to fish and anadromous fish habitat from the same type of partial revocation and is incorporated by reference. The Environmental Assessment quantified disturbance types and proximity to rivers, streams, and floodplains on 163 randomly selected Alaska Native Allotments across the State of Alaska. It determined that potential negative effects to local water quality and aquatic resources are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat, including the crucial whitefish spawning habitat R&I values for the Alatna River ACEC.

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would help protect R&I values within this designated ACEC and reduce threats to R&I values.

M.8 ARMS LAKE RNA

The entire potential ACEC/RNA (11,000 acres) would not be designated. While off-highway vehicles (OHVs) or other surface-disturbing activities could potentially affect sand dunes, the sand dunes in this area are difficult to access due to the geography of the area, so disturbance is unlikely. Consequently, any direct or indirect protections from management actions on undesignated acres could help preserve the soil and vegetation R&I values in the area.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs solely for the purposes of allowing selection by Alaska Native Vietnam-era veterans under the Dingell Act. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building trails, houses or hunting lodges or hunting and fishing; this would convert vegetation to other vegetation or development. Based on the ANVLAP analysis, impacts to the values of sand dune complex and associated vegetation and limnological characteristics are expected to be limited based on historic land use patterns on Native Allotments in Alaska.

The BLM would not designate this ACEC because, although this is a research area, no known research has been conducted in more than 20 years.

Special management attention is not required to protect the potential Arms Lake ACEC/RNA because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. The R&I values, specifically the sand dunes, are adequately protected under the general management provisions of Alternative E; in particular the Arms Lake area is withdrawn by PLO 5180 which closes the lands to mineral leasing and mineral entry (but open to metalliferous). Further, the reasonably foreseeable development (Appendix N of the Proposed RMP/Final EIS) determined that the area has low mineral development potential and so impacts from metalliferous mineral development are unlikely. And, because the area is bordered by private land on the north and east sides, there is limited access for OHVs to the sand dunes.

M.9 GALBRAITH LAKE

The entire potential ACEC (52,000 acres) would be designated to protect cultural resources, high scenic values, and crucial Dall sheep habitat, including mineral licks.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis quantified disturbance types and proximity to cultural resources and historic sites for known cultural resources sites through the Alaska Office of History and Archaeology database within the acres under consideration for allotment selection across the State of Alaska. It determined that potential negative effects to cultural resources and high scenic values are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Some activities the BLM expects could occur as result of allotment selection, such as clearing land, building a cabin, or developing a camping area could temporarily disturb Dall sheep. However, opening these lands to allotment selection is not likely to adversely affect and R&I value of Dall sheep or Dall sheep habitat. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to cultural resource R&I values for the Galbraith Lake ACEC.

M.10 GALENA MOUNTAIN

The entire potential ACEC (75,000 acres) would not be designated. The undesignated ACEC is in PLO 5180 and so 75,000 undesignated acres would be open to metalliferous locatable mineral entry; and regardless, the mineral potential is also low. The entire potential ACEC would remain withdrawn from fluid mineral leasing; and regardless, the mineral fluid mineral potential is also low. Of the acres open for locatable mineral entry, 29,000 are State-selected and segregated from mineral entry.

Of the total area, 62,000 acres would be closed to mineral material sales. This closure would result in more protections for the wildlife R&I by limiting wildlife disturbance and wildlife habitat destruction.

There would be a seasonal OHV limitation on 62,000 acres for caribou calving, which would result in some protections to the Galena Mountain Herd (GMH) from motorized travel.

Of the total area, 62,000 undesignated acres (83 percent of the entire potential ACEC) would overlap with right-of-way (ROW) avoidance areas. The remaining undesignated acres would be available for ROW location.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis concluded that some activities the BLM expects could occur as result of allotment selection, such as clearing land, building a cabin, or developing a camping area could temporarily disturb Dall sheep. However, opening these lands to allotment selection is not likely to adversely affect and R&I value of calving grounds of the GMH. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to cultural resource R&I values for the Galena Mountain ACEC.

Special management attention is not required to protect the potential Galena Mountain ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. The other management measures of ROW avoidance and closed to mineral material disposal would protect the GMH core caribou range's R&I values of core caribou range. The mineral closures to mineral leasing along with low potential for mineral development would protect the R&I values. The BLM would not designate this ACEC because the GMH boundary more accurately captures the small part of the mountain for caribou herd use than the ACEC boundary.

M.11 HOGATZA RIVER TRIBUTARIES

Under the Approved RMP, 221,000 acres (100 percent of the entire potential ACEC) of the potential ACEC would be designated to protect crucial chum salmon summer spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (55,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis determined that potential negative effects to local water quality and aquatic resources are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat, including the crucial salmon spawning habitat R&I values for the Hogatza River ACEC.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

M.12 HUSLIA RIVER TRIBUTARIES

Under the Approved RMP, 73,000 (100 percent of the potential ACEC) would be designated to protect Chinook, chum, coho, and sockeye salmon and whitefish spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide to protect R&I values. Within the stream order-based 100-year floodplain buffer areas (9,000 acres), the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis that potential negative effects to local water quality and aquatic resources are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat, including the Chinook, chum, coho, and sockeye salmon and whitefish spawning habitat R&I values for this ACEC.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.13 INDIAN RIVER

Under the Approved RMP, 173,000 (100 percent of the potential ACEC) would be designated to protect crucial Chinook and chum salmon summer spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (17,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis determined that potential negative effects to local water quality and aquatic resources are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat under the Approved RMP, including the crucial salmon spawning habitat R&I values for the Indian River ACEC, including the R&I values of crucial Chinook and chum salmon summer spawning habitat.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.14 ISHTALITNA CREEK HOT SPRINGS RNA

The entire potential ACEC/RNA (1,000 acres) would not be designated. These 1,000 acres would continue to be segregated under PLOs and available for locatable mineral entry. The hot springs and surrounding lands (160 acres) are closed to mineral entry under PLO 399 of August 20, 1947, which withdrew all hot springs in Alaska from entry and all forms of appropriation.

The potential ACEC also would be withdrawn from fluid minerals leasing. While the area would be available for mineral material sales, this activity is unlikely to occur or could be relocated to avoid the area.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

None of Ishtalitna Creek Hot Springs RNA/ACEC is currently ANCSA selected, although there are ANCSA selections about 3 miles north of this ACEC. Due to this proximity of the RNA/ACEC to the ANCSA selected lands, it is more likely that these lands would be selected by Native Vietnam-era veterans under the Approved RMP. The ANVLAP analysis determined that potential negative effects to local water quality and aquatic resources (like the R&I value for hot springs in this potential ACEC) are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat.

These 1,000 acres would be open to commercial timber development, which could degrade R&I values due to surface disturbance, including destruction of soils.

Special management attention is not required to protect the potential Ishtalitna Creek Hot Springs RNA/ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. Routine management measures to protect hot springs would protect the R&I values. The BLM would prohibit the following within a 160-acre square centered on the hot springs: mineral materials disposal, nonenergy solid mineral leasing and development, surface-disturbing activities, surface occupancy for fluid minerals, and new ROWs in the hot springs. Travel in this area would be limited to existing trails. New ROWs would be avoided for the 160-acre square centered on the hot springs. These allocations would protect the R&I values of the ACEC/RNA.

M.15 JIM RIVER

The entire potential ACEC would be designated (100 percent, or 303,000 acres) to protect Dall sheep, crucial Chinook and chum salmon spawning habitat and overwintering habitat for resident fish, soils, water, cultural resources, and scenic values. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (30,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing. Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial Chinook and chum salmon spawning habitat and overwintering habitat for resident fish R&I values for this ACEC.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.16 KANUTI HOT SPRINGS

The entire potential ACEC/RNA (160 acres) would not be designated. The ACEC and surrounding lands (160 acres) are closed to mineral entry under PLO 399, which withdrew all hot springs in Alaska from entry and all forms of appropriation. The existing withdrawals would remain in place on the 160 acres. The entire area is withdrawn from fluid minerals, which could protect R&I values by limiting surface disturbance on these acres.

Under the Approved RMP, a portion of the potential ACEC would be open to timber development, which could degrade R&I values due to surface disturbance, including destruction of soils. However, hot springs are unlikely to be forested to the extent that commercial timber development would take place.

Since the land is withdrawn by PLO 399, the revocation in part of the ANCSA 17(d)(1) withdrawals would not result in any allotments within the potential ACEC/RNA.

Special management attention is not required to protect the potential Kanuti Hot Springs ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. The BLM would prohibit the following within a 160-acre square centered on the hot springs: mineral materials disposal, nonenergy solid mineral leasing and development, surface-disturbing activities, surface occupancy for fluid minerals, and new ROWs in the hot springs. Travel in this area would be limited to existing trails. New ROWs would be avoided for the 160-acre square centered on the hot springs. These allocations would protect the R&I values of the ACEC/RNA.

M.17 KLIKHTENTOTZNA CREEK

Under the Approved RMP, 108,000 acres (100 percent of the potential ACEC) would be designated to protect crucial chum salmon summer spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (18,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including crucial chum salmon summer spawning habitat R&I values for this ACEC.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.18 LAKE TODATONTEN PINGOS RNA

The entire potential ACEC/RNA (1,000 acres) would not be designated.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis determined that potential negative effects to features like pingos are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to pingos.

Special management attention is not required to protect the potential Lake Todatonten Pingos RNA/ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. Routine management measures to protect pingos, especially ROW avoidance, would protect the R&I values.

M.19 MCQUESTEN CREEK RNA

The entire potential ACEC/RNA (4,000 acres) would not be designated. McQuesten Creek RNA is within Tozitna ACEC, designated in the Approved RMP, and therefore designation of McQuesten Creek RNA is not needed to protect R&I values. McQuesten Creek RNA's R&I values are a low-gradient hot springs system and unique assemblages of plants associated with the system. The BLM would prohibit the following within a 160-acre square centered on the hot springs: mineral materials disposal, nonenergy solid mineral leasing and development, surface-disturbing activities, surface occupancy for fluid minerals, and new ROWs in the hot springs. Travel in this area would be limited to existing trails. New ROWs would be avoided for the 160-acre square centered on the hot springs. The Tozitna ACEC's R&I values are crucial salmon spawning habitat and Ray Mountains Herd (RMH) core habitat. Protections for the Tozitna ACEC (NSO for fluid minerals, closed to mineral materials development, and keeping BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames out of the 100-year floodplain) would protect the R&I values of the McQuesten Creek RNA.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis determined that potential negative effects to local water quality and aquatic resources (like the R&I value for hot springs in this potential ACEC) and are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to fish and fish habitat.

M.20 MENTANONTLI RIVER/LAKE TODATONTEN

The entire potential ACEC (20,000 acres) would be designated as an ACEC to protect crucial feeding habitat for humpback whitefish and for the whitefish migration route. The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including crucial feeding habitat for humpback whitefish and for the whitefish migration route R&I values for this ACEC.

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect ACEC values.

M.21 MIDNIGHT DOME/KALHABUK

The Midnight Dome/Kalhabuk ACEC would be designated (10,000 acres) to protect Dall sheep habitat and mineral lick protection zones.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing. The ANVLAP analysis determined that opening these lands to allotment selection is not likely to adversely affect and R&I value of Dall sheep or Dall sheep habitat.

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values.

M.22 NUGGET CREEK

The entire potential ACEC (3,000 acres) would be designated to protect priority Dall sheep habitat (including mineral licks).

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values.

M.23 POSS MOUNTAIN

The entire potential ACEC (25,000 acres) would be designated to protect priority Dall sheep habitat (including mineral licks).

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values.

M.24 REDLANDS LAKE RNA

The entire potential ACEC/RNA (4,000 acres) would not be designated.

The area is currently withdrawn from locatable mineral entry, except for metalliferous, and withdrawn from fluid minerals leasing under PLO 5180. However, the entire potential ACEC is open to mineral material sales. Consequently, the R&I values could be degraded due to impacts from infrastructure development and surface disturbance associated with mineral materials development, including destruction of vegetation and erosion that could degrade soils. However, given the low total foreseeable need for mineral materials in the planning area and that the location most likely to need mineral materials is the Dalton Corridor, the potential for mineral material development is low.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

The ANVLAP analysis determined that opening these lands to allotment selection is not likely to adversely affect the R&I value of the sand dunes.

The area would also be managed as visual resource management (VRM) Class IV. The 4,000 undesignated acres would be open to commercial timber development, which could degrade R&I values due to surface disturbance, including destruction of vegetation and erosion that could degrade soils. Given that the undesignated ACEC is a remnant lake and sand dunes complex, commercial timber development is unlikely.

Special management attention is not required to protect the potential Redlands Lake RNA/ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. The BLM would not designate this ACEC because, although this is a research area, no known research has been conducted in more than 20 years. The R&I values are the remnant lake and sand dunes complex. Given the low potential for environmental impacts in this RNA, the RMP provides protection of R&I values without ACEC special management.

M.25 SETHKOKNA RIVER

The entire potential ACEC would be designated to protect crucial Chinook salmon spawning habitat, soil, and water. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (34,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial Chinook salmon spawning habitat R&I values for this ACEC.

Of the designated ACEC, 3,000 acres are currently Native-selected. Even if the BLM designates this land, this portion or nearby potion of this ACEC would be selected. If these lands were conveyed, they would leave federal protection and the conveyed portion of the ACEC would no longer be designated. Impacts to the R&I values of crucial Chinook salmon spawning habitat, soil, and water could occur, but they would be minor.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.26 SOUTH FORK KOYUKUK RIVER

The entire potential ACEC (415,000 acres) would be designated to protect crucial Chinook salmon and chum salmon spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (44,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and for all BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including cabins and tent frames, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial Chinook salmon spawning habitat and chum salmon spawning habitat R&I values for this ACEC.

Of the designated ACEC, 24,000 acres are currently Native-selected. Even if the BLM designates this land, this portion or nearby potion of this ACEC may be conveyed. If lands were conveyed, they would leave federal protection and the conveyed portion of the ACEC would no longer be designated. Impacts to the R&I values of fish and riparian habitat could occur, but they would be minor.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.27 SOUTH TODATONTEN SUMMIT RNA

The entire potential ACEC/RNA (1,000 acres) would not be designated.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing. The ANVLAP analysis determined that potential negative effects to features like features like pingos are likely to be minimal if future land use practices remain similar in scope and scale to historic levels. Based on this analysis it is anticipated that the partial revocation would result in minimal impacts to pingos.

Special management attention is not required to protect the potential South Todatonten Summit RNA/ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. Routine management measures to protect pingos, especially ROW avoidance, would protect the R&I values.

M.28 SPOOKY VALLEY RNA

The entire potential ACEC/RNA (9,000 acres) would not be designated. The R&I values for Spooky Valley RNA are geological, physiographic, vegetation, and scenic values. The Tozitna ACEC's R&I values are crucial salmon spawning habitat and RMH core habitat. Protections for the Tozitna ACEC (NSO for fluid minerals, closed to mineral materials development, and keeping BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames out of the 100-year floodplain) would protect the R&I values of the Spooky Valley RNA. Spooky Valley RNA is within Tozitna ACEC, designated in the Approved RMP, and therefore designation of Spooky Valley is not needed to protect R&I values because the Tozitna ACEC allocations would protect the Spooky Valley undesignated ACEC also.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing. Based on the ANVLAP analysis, impacts to the values of Spooky Valley's geological, physiographic, vegetation, and scenic values are expected to be limited based on historic land use patterns on Native Allotments in Alaska. There is a low likelihood of selections or subsequent development in this area because of its remoteness.

M.29 SUKAKPAK/SNOWDEN MOUNTAIN

Of the Sukakpak/Snowden Mountain area, 50,000 acres (40 percent of the entire potential ACEC area) would be designated as the Snowden Mountain ACEC to protect priority Dall sheep habitat (including mineral licks) and soils (natural mineral licks are rare and sensitive soil types). The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values. The remaining 74,000 acres (60 percent of the entire potential ACEC area) would not be designated.

The entire undesignated area would be encumbered under PLO 5150 and withdrawn from fluid mineral leasing and mineral entry, while all the undesignated area would continue to be open to mineral material sales. Consequently, the R&I values in this area could be degraded due to impacts from infrastructure development and surface disturbance associated with mineral development, including destruction of geologic features and scenic values. However, the VRM Class II objective would reduce these impacts. There would be 29,000 acres (40 percent of the undesignated area) that would continue to be withdrawn from locatable mineral entry, which would prohibit surface-disturbing activities associated with minerals development and protect the R&I values in this area. Portions of the areas open to locatable mineral entry and metalliferous entry have medium development potential.

Limiting OHV travel to existing routes on all the undesignated area would reduce impacts on R&I values from motorized and mechanized travel by limiting surface disturbance. Limited OHV use by an adjacent landowner within the Mathews River corridor has not negatively affected sheep or sheep habitat.

The designated portion of the ACEC would be managed as VRM Class II objectives, which would not allow modifications to the landscape that have noticeable or dominant visual contrasts. This would protect R&I values of the high scenic values and geology R&I values.

M.30 SULUKNA RIVER

The entire potential ACEC area 398,000 acres (100 percent of the potential ACEC) would be designated to protect crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (51,000 acres) to protect R&I

values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW exclusion, closed to fluid mineral leasing and development, closed to nonenergy solid mineral leasing and development, closed to mineral extraction or collection, limited motorized vehicle use to designated routes and trails (or by authorization for vehicles exceeding 1,500 pounds by curb weight) and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species R&I values for this ACEC.

Of the designated ACEC, 87,000 acres are currently Native-selected. Even if the BLM designates this land, this portion or nearby potion of this ACEC could be conveyed. If these lands were conveyed, they would leave federal protection and the conveyed portion of the ACEC would no longer be designated. Impacts to the R&I values of protect crucial salmon and sheefish (inconnu) spawning habitat.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.31 TOOLIK LAKE RNA

The entire potential ACEC/RNA area (106,000 acres) would be designated to protect the high-value Toolik Field Station.

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values.

M.32 TOZITNA, TOZITNA RIVER, AND TOZITNA SUBUNITS NORTH AND SOUTH

Of the Tozitna River ACEC area, 835,000 acres (80 percent of the entire potential ACEC area) would be designated to protect caribou habitat, soils, water, and crucial salmon spawning habitat. The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values. The remaining acres within the Tozitna ACEC, Tozitna River ACEC, and Tozitna Subunits North and South would not be designated to protect caribou habitat, water, and soils.

Special management prescriptions related to high-value watersheds as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (85,000 acres within the Tozitna River ACEC area) and offer protection to R&I values. Within these stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, and NSO for fluid mineral leasing and development.

ACEC-wide special management includes closure to mineral materials disposal, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis based on historic land use patterns on Native Allotments in Alaska, impacts to the R&I values from this partial revocation would result in minimal impacts on soils, water, and crucial salmon spawning habitat.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

Special management attention is not required to protect the entire potential Tozitna ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. The special management measures of RMH core caribou range would protect the R&I values for the undesignated portion of the potential ACEC. RMH would be closed to fluid mineral leasing, ROW avoidance, and closed to mineral material disposal. The R&I values of crucial salmon spawning habitat would be protected by the ACEC designation and the floodplains allocations. The northern, undesignated portion of the ACEC does not have the R&I value crucial salmon spawning habitat and therefore does not need special management to protect fish R&I in this portion. The northern, undesignated portion of the ACEC has caribou habitat.

M.33 UPPER KANUTI RIVER

This ACEC's R&I values are for wildlife (caribou) and cultural (traditional/ethnographic significance). The entire potential ACEC (50,000 acres) would not be designated. Just under half of the potential ACEC (24,000 acres) is withdrawn from locatable mineral entry and the entire potential ACEC is withdrawn from fluid minerals under PLO 5150 and 5179. This would protect the R&I values on these acres. The remaining 26,000 acres that are open to locatable mineral entry could experience impacts from this activity.

The 50,000 undesignated acres would be open to commercial timber development, which could degrade R&I values due to surface disturbance including disturbance to wildlife, destruction of wildlife habitat, and degradation of cultural resources and values. However, expanded commercial forestry harvesting is not expected in the decision area, The entire undesignated area would continue to be managed according to VRM Class III or VRM Class IV objectives. OHV travel would be limited to existing routes on all 50,000 undesignated acres.

Special management attention is not required to protect the potential Upper Kanuti River ACEC because standard or routine management prescriptions are sufficient to protect the resource or value from risks or threats of damage/degradation. Routine management measures to protect hot springs would protect the R&I values. There is no tangible threat the caribou in this area; therefore, that R&I does not warrant special management. The cultural R&I of traditional/ethnographic significance would be protected through the National Historic Preservation Act, Section 106. Any proposed disturbances would have to have a new survey or document an existing adequate survey. Cultural resources would need to be avoided or the BLM would need to consult with the State Historic Preservation Officer. The BLM would prohibit the following within a 160-acre square centered on the hot springs: mineral materials disposal; nonenergy solid mineral leasing and development, surface-disturbing activities, surface occupancy for fluid minerals, and new ROWs in the hot springs. Travel in this area would be limited to existing trails. New ROWs would be avoided for the 160-acre square centered on the hot springs. These allocations would protect the R&I values of the ACEC/RNA.

M.34 UPPER TEEDRIINJIK (CHANDALAR) RIVER

The entire potential ACEC (294,000 acres) would be designated to protect crucial habitat for Chinook salmon, and summer and fall habitat for: chum salmon, coho salmon, whitefish, and cisco. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (31,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

The Approved RMP recommends that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. Actions that Alaska Native Vietnam-era veterans may take on their allotment include building houses or hunting lodges or hunting and fishing.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial habitat for Chinook salmon, and summer and fall habitat for chum salmon, coho salmon, whitefish, and cisco R&I values for this ACEC.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.35 WEST FORK ATIGUN RIVER

Under the Approved RMP, 100 percent (34,000 acres) of the entire potential ACEC would be designated to protect priority Dall sheep habitat, including mineral licks. The Approved RMP recommends that the

Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans. This ACEC is in PLO 5150 and so would not be affected by this action.

The management prescriptions identified in Appendix J of the Proposed RMP/Final EIS would protect the R&I values within this designated portion of the ACEC.

M.36 WHEELER CREEK

The entire potential ACEC (145,000 acres) would be designated to protect crucial chum salmon summer spawning habitat. Special management prescriptions as described in Appendix J of the Proposed RMP/Final EIS would be applied to stream order-based 100-year floodplain buffers watershed-wide (16,000 acres) to protect R&I values. Within the stream order-based 100-year floodplain buffer areas, the following special management applies: closed to mineral materials disposal, ROW avoidance, NSO for fluid mineral leasing and development, and subject to valid existing rights, permanent camps and support facilities would not be located within the confines of the ACEC, except for scientific purposes.

Based on the ANVLAP EA analysis, it is anticipated that this partial revocation would result in minimal impacts to fish and fish habitat, including the crucial chum salmon summer spawning habitat R&I values for this ACEC.

For areas open to locatable minerals, as per the mining regulations, ACEC designation requires development of a Plan of Operations, subject to the NEPA process, for any exploration activities, thus providing more protection of R&I values for exploration activities within the ACEC relative to lands outside the ACEC where this regulatory requirement does not apply.

Areas within 50 feet of a water body would be closed to commercial timber development, which could prevent degradation of R&I values due to surface disturbance, including destruction of soils and fish habitat and erosion that could degrade aquatic habitats. Making these acres unavailable for commercial timber development would help protect R&I values by precluding timber infrastructure development, surface disturbance, and riparian habitat damage.

M.37 CONCLUSION

In general, management actions that protect resources would help maintain or improve the R&I values within undesignated ACECs; management actions that create the potential for resource degradation could diminish R&I values within undesignated ACECs. Designating ACECs would protect the R&I values in those areas, while not designating ACECs could degrade R&I values. For some ACECs, routine management such as hot springs withdrawal, ROW avoidance, or caribou core range protections can prevent impacts to R&I. Any potential projects would include mitigation measures to protect R&I values.

M.38 CUMULATIVE IMPACTS

The cumulative impacts analysis area for ACECs is the Central Yukon RMP decision area. Past, present, and reasonably foreseeable future actions and conditions within the cumulative impact analysis area that have affected and would likely continue to affect ACECs are mining, oil and gas development, transportation and infrastructure construction and development, utility corridor and ROW development, increased tourism and recreation, increased access to remote areas, wildland fires and fire suppression, flooding, and soil and permafrost changes. The direct and indirect impacts described above would cumulatively contribute to the impacts of these reasonably foreseeable future actions. However, the BLM would adaptively manage to protect R&I values and minimize impacts on these values, where applicable and feasible.

Cumulative impacts on R&I values also could result from non-BLM actions and decisions on lands adjacent to the potential ACECs. Development and growth throughout the planning area could, over time, encroach on these areas. Activities such as unauthorized off-route travel and increased noise, air, and light pollution could degrade R&I values.

Other impacts include species displacement, habitat fragmentation, and visual landscape changes that could affect R&I values. Visual disturbances, including any structures or resource developments noticeable in the viewshed of ACECs with cultural values, can affect the cultural setting. Impacts would be greater where recreation areas or development were next to an ACEC. Additionally, the effects of climate change, described under the affected environment above, could influence the rate or degree of the potential cumulative impacts.

M.39 REFERENCES

BLM (U.S. Department of the Interior, Bureau of Land Management). 1988. BLM Manual 1613—Areas of Critical Environmental Concern. Rel. 1-1541. BLM, Washington, D.C. September 29, 1988.

_____. 2015. Central Yukon Resource Management Plan Areas of Critical Environmental Concern. Report on the Application and Relevance Criteria. ACEC Final Report. Fairbanks, Alaska. https://eplanning.blm.gov/public_projects/lup/35315/66005/71748/2015-11-24_CYRMP_ACEC-Rpt_final_508_reduced.pdf

BLM GIS (Bureau of Land Management geographic information systems). 2017. GIS data used in the Central Yukon RMP alternatives, affected environment, and impact analysis. Last edit date March 2024. Fairbanks, Alaska.

Markon, C., S. Gray, M. Berman, L. Eerkes-Medrano, T. Hennessy, H. Huntington, J. Littell, et al. 2018. “2018: Alaska.” In “Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II” (Reidmiller, D.R., C.W. Avery, D. R. Easterling, K.E. Kunkel, K.L. M. Lewis, T.K. Maycock, and B. C. Stewart, editors). U.S. Global Change Research Program, Washington, D.C. pp. 1185–1241. DOI: 10.7930/NCA4. 2018.CH26.

Appendix N

The BLM State Director's Response to the Alaska Governor's Consistency Review

This page intentionally left blank.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Alaska State Office
222 West Seventh Avenue, #13
Anchorage, Alaska 99513-7504
www.blm.gov/alaska

In Reply Refer To: 1610 (933)

The Honorable Michael J. Dunleavy
Governor of Alaska
240 Main Street, Suite 300
State Capital Building
Juneau, Alaska 99801

Dear Governor Dunleavy,

The Bureau of Land Management (BLM) has reviewed your June 25, 2024, Governor's Consistency Review letter that addresses the Central Yukon (CY) Proposed Resource Management Plan and Final Environmental Impact Statement (hereafter "Proposed RMP/FEIS") that was released on April 26, 2024. This letter is the BLM response.

In accordance with the BLM's planning regulations in 43 CFR 1610.3-2- *Consistency requirements,* I have carefully considered the issues raised in your letter. These regulations implement section 202(c)(9) of the Federal Land Policy and Management Act (FLPMA) of 1976, 43 USC 1712(c)(9).

Your letter identified the following requests for incorporation:

1. The Plan frustrates the State's and Federal Government's obligations under the Statehood Act and the Alaska Land Transfer Acceleration Act (ALTAA).
2. The Plan recommends leaving in place Public Land Order (PLO) 5150 and most of the Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals. The failure to lift the PLOs is a land entitlement issue and is inconsistent with approved state plans.
3. The Plan is inconsistent with the federal statutes that implement the goals of the Alaska Statehood Act and protect the State's resource management responsibilities.
4. North Slope Area Plan did not find any lands suitable for management as Areas of Critical Environmental Concern (ACEC).
5. Inconsistencies with State Land Use Plans, Policies, and Terminology
6. The Plan and planning process failed to meet the commitments in the Master Memorandum of Agreement between the Alaska Department of Fish and Game and the

BLM (MMOU) which outlines the general guidelines within which the two agencies agree to operate and with ADF&G's 2015 Alaska Wildlife Action Plan.

7. The Plan is inconsistent with the goals of the John D. Dingell, Jr. Conservation, Management and Recreation Act: The plan fails to outline how it is expanding general hunting and fishing opportunities, as required in the John D. Dingell, Jr. Conservation, Management and Recreation Act.

The BLM appreciates your input and thanks you for the State's participation in the land use planning process for the CY Proposed RMP/FEIS. Communication, cooperation, and collaboration between the BLM and the State of Alaska is very important to the success of our land management efforts, and I look forward to continued work together in the future. To that end, I have directed my staff to respond to issues raised in your Consistency Review letter even where it does not raise concerns with consistency of the RMP with State plans.

I believe that BLM has adequately addressed your concerns in this response. Please note that you have the opportunity to appeal this response to the Director of the BLM pursuant to 43 CFR 1610.3-2(e). Such an appeal must be filed within 30 days of your receipt of this letter. If you have any questions, please feel free to contact me, or to have your staff contact Sylvia Ringer, BLM Alaska Central Yukon Field Office Manager (acting), at sringer@blm.gov; (907) 474-2210.

Sincerely,

STEVEN
COHN

Digitally signed by
STEVEN COHN
Date: 2024.08.13
14:49:09 -08'00'

Steven M. Cohn
State Director

cc:
John C. Boyle III, Commissioner, Department of Natural Resources
Doug Vincent-Lang, Commissioner, Alaska Department of Fish and Game
Emma Pokon, Commissioner, Alaska Department of Environmental Conservation
Ryan Anderson, Commissioner, Alaska Department of Transportation & Public Facilities
Treg Taylor, Alaska Attorney General, Alaska Department of Law
Catherine Heroy, Federal Program Manager, Office of Project Management and Permitting
The Honorable Lisa Murkowski, United States Senator
The Honorable Dan Sullivan, United States Senator
The Honorable Mary Peltola, United States Representative

THE GOVERNOR'S REQUESTS AND BLM'S RESPONSES

1. The Plan frustrates the State's and Federal Government's obligations under the Statehood Act and the Alaska Land Transfer Acceleration Act (ALTAA)

1.1 State's Issue Excerpt Text:
The 2004 ALTAA and the 2009 BLM Conveyance Project resolved many procedural obstacles to completing the land transfers mandated by the Statehood Act and ANCSA, but the State's outstanding land entitlement still stands at just over five million acres. The State has identified lands within PLO 5150 as its highest priority for selection and conveyance. Some smaller portions of the PLO 5150 original area have already been opened and conveyed out of federal ownership; however, additional conveyances are being restricted by BLM's failure to fully revoke PLO 5150.

The Plan recommends leaving in place PLO 5150 and most of the ANCSA 17(d)(1) withdrawals. The failure to lift the PLOs is a land entitlement issue and is inconsistent with approved state plans.

> **BLM Response:**
> The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.
>
> Section 207 of the Alaska Land Transfer Acceleration Act directed the Secretary to review all ANCSA 17(d)(1) withdrawals and develop a report to Congress that "identifies any portion of the [public] lands… withdrawn [under ANCSA 17(d)(1)] that can be opened to appropriation under the public land laws consistent with the protection of the public interest in these lands." In 2006, the BLM submitted a report to Congress which included a cursory review of BLM-managed public lands in Alaska and recommended the revocation of much of the ANCSA 17(d)(1) withdrawals if determined appropriate through the land use planning process, while asserting the need to retain the withdrawals for approximately 2 million acres of lands within the Central Yukon Field Office, including the land withdrawn by PLO 5150. The recommendations in the 2006 report to Congress were not subject to environmental analysis and are not binding on any of the BLM's future recommendations, including those in this Proposed RMP/FEIS, or the Secretary's actions.
>
> After careful consideration, the Proposed RMP/FEIS recommends a partial revocation of the ANCSA 17(d)(1) withdrawals within the Central Yukon Planning Area for the limited purpose of allowing Alaska Native Vietnam-era veterans to select allotments under Section 1119 of the Dingell Act, but to otherwise stay withdrawn. The Proposed RMP/FEIS determined that it is in the public interest to continue the protection afforded by the ANCSA 17(d)(1) withdrawals for the majority of the lands in the planning area, particularly with regards to ensuring subsistence access and maintenance of subsistence

resources. As addressed in the Proposed RMP/FEIS, the revocation of the PLO 5150 corridor and the overlying ANCSA 17(d)(1) withdrawals would result in the loss of access for the rural subsistence users to public lands on both sides of the Dalton Highway. The withdrawals also provide protection for the cultural and historical resources of the lands, both in those lands where the surveys for such resources have occurred and in the locations where surveys have not yet occurred to identify those resources.

While the State highly prioritizes the conveyance of these lands, the retention of PLO 5150 and the overlapping ANCSA 17(d)(1) withdrawals is not a land entitlement issue. The State has top-filed selections on public lands withdrawn under PLO 5150. A top-filing does not create entitlement to land. If the withdrawal is revoked, the top-filings would become effective selections under the State's entitlement and the BLM would need to act on that entitlement to convey the lands to the State. However, there is no requirement for the Department to make the lands available for State selection simply because the lands are top-filed. While the BLM understands the importance that the State places on receiving the lands within the 5150 corridor, the BLM's recommendations in the Proposed RMP/FEIS must also take into account the need to protect the public interests in the land. Further, the vast majority of BLM-managed public lands in the planning area that are withdrawn under ANCSA 17(d)(1) outside of PLO 5150 are not top-filed by the State; in fact; only 6 percent (approximately 634,000 acres) of these withdrawn lands are top-filed. The State currently has over 12.6 million acres of selected lands, including approximately 5.2 million acres within the Central Yukon Planning Area, from which it can receive its approximately 5.2 million acres of remaining entitlement. The BLM stands ready to convey the remaining acres of entitlement as soon as the State requests the conveyance of lands from its selections.

Finally, the primary purpose of the withdrawal established by PLO 5150 is to provide "a utility and transportation corridor within the meaning of section 17(c) of [ANCSA] in aid of programs for the U.S. Government and the State of Alaska" (36 Fed. Reg. 25410) and it continues to fulfill that purpose. The purposes of the ANCSA 17(d)(1) withdrawals are to allow lands for selection by ANCSA Native Corporations and to ensure that the public interest in the lands is properly protected. The lands encumbered by PLO 5150 are also withdrawn consistent with ANCSA 17(d)(1). As identified in the Proposed RMP/FEIS, there is significant public interest in access to lands managed under ANILCA's rural subsistence priority which requires continued protection. As the ANCSA 17(d)(1) withdrawals and PLO 5150 are still fulfilling the purposes for which each were created, the BLM does not recommend their revocation at this time.

2. The Plan recommends leaving in place PLO 5150 and most of the Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals. The failure to lift the PLOs is a land entitlement issue and is inconsistent with approved state plans.

2.1 State's Issue Summary, Revoking PLO 5150 in a Separate Single Issue NEPA Process: The BLM does not recommend revoking PLO 5150 in the Central Yukon RMP nor is the BLM starting a separate single issue NEPA process to do so.

BLM Response:
The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The issue of revoking PLO 5150 and overlapping ANCSA 17(d)(1) withdrawals in a separate, single-issue National Environmental Policy Act (NEPA) process is outside the scope of the RMP. Though the State has requested that PLO 5150 be addressed through the Central Yukon Resource Management Plan (RMP) process, BLM has consistently communicated the need for the State's current proposal for a partial revocation of PLO 5150 to be handled through a separate environmental assessment to ensure we engage all stakeholders in shaping a durable solution. The BLM's rationale for not recommending revocation of PLO 5150 is explained in the BLM's response to 2.2, below.

2.2 State's Issue Excerpt Text, Recommending Revocation of PLOs:
The State has approximately 5 million acres of Statehood Act land entitlement remaining to be conveyed. Appropriately, the State periodically reevaluates its selections and priorities to ensure that the interests of the State are protected while making final entitlement decisions. These interests are varied and include community connectivity leading to long-term viability; regional and statewide transportation needs; infrastructure needs such as electrical transmission, broadband connectivity, potential liquified natural gas pipeline projects; connecting isolated areas of State lands; and access to mineralized areas – including critical and strategic minerals important to current and future technological industries – to name a few. The entirety of PLO 5150 within the planning area makes up approximately 2.4 million acres, within that, the State has ANILCA-protected top-file selections on approximately 1.5 million acres along the Dalton highway corridor. The lands within PLO 5150 have been identified as the highest priority top-file selections for the State.

To achieve consistency with State plans, BLM must lift PLO 5150 and ANCSA Section 17(d)(1) withdrawals in the final plan to allow the fulfillment of outstanding State and other land entitlements. This action was already subject to public review in Alternatives C-2 and D in the Draft EIS.

BLM Response:
The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

Under FLPMA, only the Secretary of the Interior, not the BLM, can issue a public land order to make, modify, extend, or revoke withdrawals, including ANCSA 17(d)(1) withdrawals and PLO 5150. The BLM, through the Central Yukon RMP/EIS process, analyzed the environmental impacts of retaining or revoking, fully or in part, withdrawals and made recommendations to the Secretary consistent with that analysis. While the

Secretary is not bound by those recommendations, she may rely on the BLM's environmental analysis to support her decision in the future.

The Proposed RMP/FEIS analyzed the potential environmental impacts and potential impacts to the public interest from revoking the withdrawals; those impacts are summarized below.

1) If the Secretary were to revoke PLO 5150 and the overlapping ANCSA 17(d)(1) withdrawal:

    a. All State top-filings on the affected PLOs would become effective State selections and Federal subsistence priority for rural residents would no longer apply to these lands. This would remove most of the subsistence areas from federal subsistence priority for the residents of Coldfoot and Wiseman, and the six other communities that have depended upon the PLO 5150 corridor for customary and traditional use since passage of ANILCA.

    b. It would have the practical effect of removing access to lands managed pursuant to the federal subsistence priority lands outside of the PLO 5150 corridor. Alaska Statute 19.40.210[1] would apply to all State top-filed lands that become effective State selections and would prohibit federally qualified subsistence users' OHV access to public lands on either side of the Dalton Highway corridor. Under ANILCA, State selected lands are not considered public lands for the purposes of federally qualified subsistence. Once conveyed, the BLM cannot guarantee the area will be open to subsistence use or that access across the land to other federally managed land will be allowed.

2) If the Secretary were to revoke the ANCSA 17(d)(1) withdrawals:

    a. All State top-filings on the affected PLOs would become effective State selections and would immediately be segregated and unavailable to mineral entry and leasing, and mineral material sales.

    b. All State top-filings on the affected PLOs would become effective State selections and Federal subsistence priority for rural residents would no longer apply to these lands.

---

[1] HB 125, if signed into law by the Governor, would amend the language of AS 19.40.210 so the "commissioner of natural resources may authorize easements on state land within the corridor from the E. L. Patton Bridge north to the southern boundary of the North Slope Borough to facilitate access under (a)(1) - (4) of this section and to provide motorized access to (1) adjacent federal land; (2) Native allotments; and (3) land conveyed to and held by Alaska Native corporations under the Alaska Native Claims Settlement Act." https://www.akleg.gov/basis/Bill/Detail/33?Root=HB%20125. Even if HB 125 becomes law, it still leaves it to the discretion of the commissioner whether subsistence users would have access and thus does not guarantee access will be allowed.

c. The State's Priority 1 and 2 top filings would become effective selections and would be conveyed to the State. As a result, the lands would no longer be managed under BLM authority, but rather under State law. The State would determine how these lands are managed. These lands would likely become open to mineral entry and mineral leasing, as well as other land uses not allowed under current federal management. If the State chose to allow mineral development after conveyance, that would likely result in impacts from mineral development.

Due to the potential for environmental impacts and impacts to the public interest described in the Proposed RMP/FEIS, the BLM recommends only revoking the ANCSA 17(d)(1) withdrawals to allow Alaska Native Vietnam-era veterans to select allotments under Section 1119 of the Dingell Act. While any such revocation and selection by Alaska Native Vietnam-era veterans would result in certain lands being conveyed out of federal administration, it would not occur on a scale likely to cause a significant restriction in federally qualified subsistence uses.

2.3 State's Issue Excerpt Text, North Slope Area Plan:

The Plan is inconsistent with North Slope Area Plan emphasis on access to State lands for the use and enjoyment of fish and wildlife, and development of needed infrastructure by local communities. The Plan hinders current and future access to State lands and assigns inappropriate management to lands traversed by State RS 2477 rights-of-way and proposed transportation corridors. For example, the Plan assigns a primitive or semi-primitive setting to backcountry conservation areas (BCA), extensive recreation management areas (ERMA), and special recreation management areas (SRMA) which conflict with State identified transportation corridors and State top-filed selections within the Dalton Highway Corridor. These BLM management areas conflict with the current and proposed transportation corridors providing access to State lands and an objective of the North Slope Area Plan: "To enhance connectivity of communities within and outside of the planning boundaries."

BLM Response:
The BLM reviewed the North Slope Area Plan and will add a reference to it in the Approved RMP, Appendix C, Relationship to BLM Policies, Plans, and Programs. The BLM's recommendations to the Secretary are explained in issues 1.1 and 2.2, above.

Under all alternatives, proposed management decisions would be subject to valid existing rights. The Proposed RMP/FEIS's Travel and Transportation Management maps display valid existing rights and where the State has asserted RS 2477 routes on BLM-and non-BLM managed land. The State of Alaska may hold valid existing ROWs in the planning area pursuant to Revised Statute 2477 (RS 2477), Act of July 28, 1866, Chapter 262, 8,14; Stat. 252, 253, codified at 43 USC 932. Congress repealed RS 2477 through passage of FLPMA. RS 2477 rights are determined through a process that is entirely independent of the BLM's land use planning process. This planning effort is not intended to provide any evidence bearing on or addressing the validity of any RS 2477 assertions and does not adjudicate, analyze, or otherwise determine the validity of claimed ROWs. Nothing in this RMP would extinguish any valid existing ROW or alter in any way the legal rights the State may have to assert and protect RS 2477 rights in federal court consistent with applicable law. At such time as Federal courts may adjudicate the existence or scope of any RS 2477 ROW, the BLM will adjust its management accordingly, if necessary.

The Proposed RMP/FEIS's rural, frontcountry, backcountry, and semi-primitive recreation settings correspond with the BLM's recreation settings characteristics matrix. Recreation opportunities, recreation opportunity spectrum (ROS), recreation setting character conditions, and recreation settings are not land use planning allocations, but instead descriptive qualities of recreation used as targets. Descriptive qualities of recreation that are used as targets do not conflict with State-identified transportation corridors and State top-filed selections. The SRMA, BCA, and their associated ROS values are meant to guide and enhance recreation, access, and opportunities for those uses.

2.4 State's Issue Excerpt Text, Dalton Highway Master Plan:
The retention of PLO 5150 is inconsistent with the Dalton Highway Master Plan (DHMP) which provides, "The Utility Corridor was created by PLO 5150 on December 30, 1971, to protect the route of the Trans Alaska Pipeline by withdrawing the corridor from mineral location/leasing, settlement, and state and Native selection." (DHMP, p. 3) The Trans-Alaska Pipeline has long since been built, and the primary purpose of PLO 5150 was achieved, making it no longer necessary and inconsistent with a master plan to which BLM was a signatory.

BLM Response:
The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The BLM reviewed the Dalton Highway Master Plan and will add a reference to it in the Approved RMP, Appendix C. The BLM's PLO recommendations to the Secretary are explained in issues 1.1 and 2.2, above.

The primary purpose of the withdrawal established by PLO 5150 is to provide "a utility and transportation corridor within the meaning of section 17(c) of [ANCSA] in aid of programs for the U.S. Government and the State of Alaska" (36 Fed. Reg. 25410) and it continues to fulfill that purpose.

2.5 State's Issue Excerpt Text, Northwest Alaska Transportation Plan:
The State addresses several of the challenges Alaska faces in developing a transportation system in northwestern Alaska in the Department of Transportation & Public Facilities Northwest Alaska Transportation Plan, Update 2022 (NWATP). This document was developed with tribes, local governments, communities, public agencies, and area residents as partners. The NWATP recognizes the changing climate as a threat to existing infrastructure systems in the planning area.

Yet the CYRMP fails to consider, or provide an ability to address, the transportation challenges that will face Alaskan communities in the upcoming years. Many area roads are built on thaw-susceptible permafrost, which as permafrost thaw accelerates causes the ground underneath the roads to subside, wash out, erode, or liquefy. Airport runways already experience seasonal hazards including ruts, frost heaves, mud, erosion, and subsidence. Climate change is accelerating this degradation. Future transportation impacts and opportunities are an important concern in this area of the state. The NWATP emphasizes the importance of maintaining flexibility in addressing these challenges. By limiting the ability to develop good quality road material sources across much of the planning area rather than addressing impacts on a project basis, BLM is effectively hamstringing infrastructure development in an area where transportation systems lack secondary options and where lack of connectivity between transportation modes impedes the efficient flow of goods and people. … Ensuring Alaska's infrastructure requires flexibility in operations and locations. The NWATP states: The revocation of PLO 5150 would also make access corridors adjoining the highway easier to implement where warranted… This is significant for communities in Northwest Alaska, which face numerous hurdles to develop such corridors where federal conservation system units and other federal lands classified for land and resource protection impede access potential.

BLM Response:
The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The BLM reviewed the Dalton Highway Master Plan and will add a reference to it in the Approved RMP, Appendix C. The BLM's recommendations to the Secretary are explained in issues 1.1 and 2.2, above. PLO 5150 and the overlapping ANCSA 17(d)(1) withdrawals do not restrict the BLM's ability to grant rights of way as needed or conduct mineral material sales, so the retention of the public land order does not remove any of the flexibility the NWATP addresses.

The revocation of PLO 5150 was analyzed in the Proposed RMP/FEIS. The BLM chose not to recommend this to the Secretary, as explained above. However, areas open to rights-of-way also could facilitate potential future transportation access. The Proposed RMP/FEIS RMP designates 14 percent of the decision area as either ROW exclusion or avoidance, and 86 percent is open to rights-of-way. The Proposed RMP/FEIS RMP only closes 7 percent of the decision area to mineral material sales (road material) and 93 percent of the decision area is open.

In summary, the BLM carefully considered the State's plans. However, the BLM planning regulations at 43 C.F.R. § 1610.3-2 and policy direction in the BLM Land Use Planning Handbook 1601 make clear that the BLM's plan should be consistent with State, local, and Tribal land use plans, insofar as they are consistent with the purposes, policies and programs of Federal laws and regulations applicable to public lands. The State's plan is in effect for the BLM to revoke the withdrawals. The Proposed RMP/FEIS analysis shows that revocation of the PLO 5150 and ANCSA 17(d)(1) withdrawals would have significant environmental impacts and impacts to the public interest, and that is why full revocation of these withdrawals is not recommended in the Proposed RMP/FEIS.

3. The Plan is inconsistent with the federal statutes that implement the goals of the Alaska Statehood Act and protect the State's resource management responsibilities.

3.1 State's Issue Excerpt Text:

The 1958 Alaska Statehood Act directed the State to select 103 million acres of vacant, unappropriated, and unreserved federal land, including the mineral estate, with the intent that the new state would manage these resources to sustain itself economically and socially. In 1971, Congress enacted the Alaska Native Claims Settlement Act (ANCSA) to resolve the aboriginal land claims of Alaska Natives and provide for the future expansion and creation of national parks, wildlife refuges, and other specially managed federal units in the State. To this end, ANCSA directed the Secretary to withdraw over 80 million acres for conservation purposes. The 1980 ANILCA specifies how these federal lands in Alaska are to be managed and contains specific provisions that further the goals of the Alaska Statehood Act. … These additional management areas [CSUs] can impede the development of additional infrastructure within the CYRMP areas, making restrictions via the CYRMP even more impactful to future State plans and potential developments. State plans note that the broad swaths of federal lands create challenges for developing access routes.

ANILCA identifies specific purposes for CSUs and other designated areas, while also incorporating numerous special provisions to protect access for traditional activities and provide access to resources [...] ANILCA also protects access for inholders, even across CSUs, and the Plan should not impose management restrictions across BLM public lands more restrictive than neighboring CSUs.

The CYRMP fails to properly respect this balance* and is thus inconsistent with the federal legislation governing the planning area.

*[this balance = opening statement of Section 101(d) ANILCA – "proper balance between the reservation of national conservation system units and those public lands necessary and appropriate for more intensive use and disposition"]

BLM Response:

The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

No new conservation system units, national conservation areas, or national recreation areas are established by the Proposed RMP/FEIS. Therefore, the Proposed RMP does not designate any CSUs, a defined term under Section 102(4) of ANILCA, when it designates ACECs. The management prescriptions in the Proposed RMP/FEIS, including ROW exclusion and avoidance areas in designated areas, do not "impose management restrictions which are more restrictive than neighboring CSUs" as the lands will still be subject to the application of ANILCA sections 811, 1110(b), or 1323(b) rights of access.

ANILCA recognized that the BLM will manage its lands pursuant to FLPMA. This includes the ability for the BLM to designate areas of public land as ACECs where relevant and important values need special management to be adequately protected. Congress understood that BLM will manage its lands in accord with FLPMA when it found in Section 101(d) of ANILCA that the law provided the "proper balance between the reservation of national conservation system units and those public lands necessary and appropriate for more intensive use and disposition." This included the requirement for BLM to "give priority to the designation and protection of areas of critical environmental concern" per Section 202(c)(3) of FLPMA. Since FLPMA was already the law, when Congress stated ANILCA set a proper balance, it understood that part of that balance was that BLM would designate lands as ACECs in the future as needed.

4. North Slope Area Plan did not find any lands suitable for management as ACECs.

4.1 State's Issue Excerpt Text:

Following planning procedures originating from Alaska Statute 38.04.060, the Alaska Department of Natural Resources (DNR) reviewed lands within the North Slope Area Plan for eligibility as areas of critical environmental concern (ACECs). For those lands north of Atigun Pass, State reviews of land conditions do not align with BLMs assertion that land conditions warrant establishing ACECs. Throughout the Plan, BLM fails to support its determinations of the same.

BLM's Response:

The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The term "areas of critical environmental concern" in Alaska Statute 38.04.060 has different meaning than as defined by Section 103(a) of FLPMA (43 U.S.C. 1702 (a)). During the development and publication of the Proposed RMP/FEIS, which occurred prior to the publication of the effective date of the BLM's Conservation and Landscape Health Rule, the Central Yukon RMP relied on the BLM's ACECs designation criteria as defined in the following documents:

1) ACEC Manual 1613,
2) BLM Instruction Memorandum (IM) 2023-013, and
3) the Central Yukon RMP Areas of Critical Environmental Concern, Report on the Application of the Relevance and Importance Criteria.

In 2023, the BLM published an Instruction Memorandum, Clarification and Interim Guidance for Consideration of Areas of Critical Environmental Concern Designations in Resource Management Plans and Amendments (https://www.blm.gov/policy/im-2023-013). This Instruction Memorandum states that the BLM should maintain an updated inventory of ACECs, evaluate them for relevant and important values, evaluate the need for special management, and publish a notification in the Federal Register when an RMP involves ACECs. The CYRMP followed this guidance, as outlined below.

The BLM inventoried the decision area for information and data on the relevance and importance of values, resources, systems or processes, and natural hazards in 2015 with the report Areas of Critical Environmental Concern Report on the Application and Relevance Criteria (BLM 2015). The BLM reviewed the potential ACECs during the review of public comments on the Draft RMP/EIS in 2021. The BLM again reviewed the potential ACECs during the writing of the Proposed RMP/FEIS and during the review of protests and the Governor's consistency review.

The BLM reviewed potential ACECs for relevant and important (R&I) values, to the extent consistent with applicable law and regulation, including landscape intactness, climate resiliency, habitat connectivity, opportunities for conservation or restoration, or have substantial significance to Tribes or Alaska Native Corporations, as defined in the ANILCA, in a way that may support Tribal co-stewardship or traditional and customary uses.

The BLM evaluated the need for special management attention to protect relevant and important values when considering whether to designate an area as an ACEC. When an ACEC is not designated in the Proposed RMP/FEIS, Appendix T documents how the relevant and important values are otherwise protected through routine management.

The BLM notified the public about publication of the Draft RMP/EIS in the Federal Register on December 11, 2020. The BLM notified the public about publication of the Proposed RMP/FEIS in the Federal Register on April 26, 2024.

Although the State's North Slope Area Plan does not identify any Alaska Statute 38.04.060 areas of critical environmental concern; the plan also does not state why it did not identify nor explain why BLM's proposed ACECs within the North Slope Area Plan (West Fork Atigun, Galbraith Lake, Toolik Lake, and Accomplishment Creek) do not warrant ACEC designation. As such, the North Slope Area Plan does not provide any rationale for finding the BLM's designation of these lands on BLM's criteria is inconsistent with the State's plan.

The Proposed RMP/FEIS identifies ACECs north of Atigun Pass are West Fork Atigun, Galbraith Lake, Toolik Lake, and Accomplishment Creek. In the ACEC Report, each ACEC has a table describing the relevant and important values. Those R&I values are summarized below.

- West Fork Atigun ACEC's relevant and important values are priority Dall sheep habitat, including mineral licks. West Fork Atigun's Dall Sheep habitat is necessary for sustaining viable sheep populations and this species is sensitive to destructive activities.

- Galbraith Lake ACEC's relevant and important values are cultural resources, high scenic values, and crucial Dall sheep habitat, including mineral licks. Protecting Galbraith Lake's habitat for Dall sheep is key to sustaining a healthy population.

- Toolik Lake RNA's relevant and important values are the high-value Toolik Field Station (including 14,000 active research plots in the ACEC). Energy transportation is the primary function of the corridor lands that comprise this RNA. However, because of the vital importance of the data produced by ongoing research, the area, including BLM Alaska sensitive species habitat, needs to be protected.

- Accomplishment Creek ACEC's relevant and important values are crucial and unique Dolly Varden trout overwintering habitat. Riparian resources, including springs like in this ACEC, are integral to the overall condition and quality of these unique aquatic refugia. Riparian resources in the ACEC perform a disproportionate number of biological and physical functions. Because of this, protection is warranted to satisfy national priorities of water quality, land health, floodplain function, and biodiversity maintenance.

Overall, the Proposed RMP and the State's North Slope Area Plan applied different standards in determining which lands should be designated as ACECs based on different authority and criteria. To the extent there is any inconsistency, it is with those different authority and criteria which are not set by the CYRMP. The fact the BLM came to different conclusions is likely based purely on differences in the federal standards compared to the State standards. The designation of ACECs is based on federal law and policy, and the State has not shown an inconsistency between its plan and the Proposed RMP when federal law and policy is applied.

5. Inconsistencies with State Land Use Plans, Policies, and Terminology

5.1 State's Issue Excerpt Text, Curb Weight:

The Plan's terminology regarding motorized access for traditional activities is inconsistent with established state land use plans and policies and with curb weight allowed under the General Permit for All-Terrain Vehicle and Utility Terran Vehicle on general state land, amended October 20, 2023.

> **BLM Response:**
> The curb weight allowed under the Plan remains consistent with the State's regulations implementing its generally allowed uses, found at 11 AAC 96.020. The inconsistency of BLM having a lower weight limit than what the State currently permits under a general permit will not lead to any degradation of the State's lands or allow uses which may hurt the State's interests if the vehicles go across the boundary. To the extent a user requires a greater vehicle which exceeds the BLM weight limit to continue practicing traditional Alaskan activities, the BLM may issue permits on a case-by-case basis. Therefore, State's recommendation will not be implemented.

5.2 State's Issue Excerpt Text, State Water Quality Protection Programs:

The Proposed Plan fails to acknowledge State water quality protection programs. The BLM has justified the creation of ACECs in the CYRMP and FEIS to protect resources, including water quality. Numerous narratives in the EIS paint a clear picture that BLM believes that any development would lead to pollution. This binary mentality does not accurately portray reality and the BLM has not provided data to support this conclusion. While the BLM's regulatory authority under FLPMA is broad and generic, the State of Alaska's is detailed and specific with clear authority for addressing compliance and enforcement of water quality standards. The ADEC [Alaska Department of Environmental Conservation] is aware of at least six existing sites impacted by pollution from placer mining in the Central Yukon Planning Area covered by the EIS and a number of these placer mine sites are subject to Total Maximum Daily Load (TMDL) plans. TMDLs are plans to bring the water quality in the water body up to acceptable levels over a specific length of time. Sites identified as "impaired" are listed on DEC's ArcGIS web map. The map provides additional links to information on locations where water quality standards have been attained and, for sites currently impaired, the plan for how attainment will be reached. This active management of water quality is more appropriate than BLM's proposed approach to prohibit or minimize development. This is in direct contrast to the State of Alaska's approach which focuses on "Conserving, improving, and protecting Alaska's natural resources and environment to enhance the health, safety, and economic and social well-being of Alaskans." The State's approach is in alignment with the Congressional intent in ANILCA, seeking to find the balance between environmental protection while supporting the development of a sustainable economy for the State's residents. Additionally, the State of Alaska regulates state mining claims in the planning area. State law requires miners to conduct mining operations in a manner that prevents unnecessary and undue degradation of the land and water resources and return the mined ground to a stable configuration to prevent erosional degradation and promote regrowth by native plant species.

BLM Response:
The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The Central Yukon RMP's Analysis of the Management Situation (AMS), Appendix B, describes the Alaska Department of Environmental Conservation (DEC) and acknowledges State water quality standards.

A main purpose of NEPA is to publicly disclose impacts from the proposed actions. The Central Yukon RMP does not state that environmental impacts to soil, water, or fish and riparian habitats from mining or development are certain to happen; instead, it addresses the reasonably foreseeable potential impacts. The Central Yukon RMP also assumes that all laws and regulations will be followed, including the State's laws. Even with the laws and regulations being followed, the designation of the ACECs recognizes the need for the protection of waterways to ensure the waters never reach a level where a TMDL needs to be designated in order to protect the R&I values.

6. The Plan and planning process failed to meet the commitments in the Master

Memorandum of Agreement between the Alaska Department of Fish and Game and the BLM (MMOU) which outlines the general guidelines within which the two agencies agree to operate and with ADF&G's 2015 Alaska Wildlife Action Plan.

6.1 State's Issue Excerpt Text, ADFG Outreach:
Despite these clear policy directions, little outreach was conducted with ADF&G beyond providing documents for review. The short review times provided substantially limited ADF&G's ability to coordinate comments with Area Biologists who have the most current information on fish and wildlife populations, species population objectives, and the uses that are occurring.

Specifically, ADF&G requested on numerous occasions to have input on the fish and wildlife portions of the document, including on the Adaptive Management Framework where BLM outlines its intent for Landscape Connectivity, Connectivity Corridors and Ecological Benchmarks.

Beyond the Wildlife Action Plan, ADF&G also repeatedly requested that BLM staff contact Area Biologists for specific information, which did not happen and is well documented by the References sections of both Volume 1, Appendices B., G., H., I., K., P., Q., R., and T. which make scant, or no, reference to ADF&G sources.

> **BLM Response:**
> The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.
>
> The BLM carefully considered the State's comments provided in its capacity as a cooperating agency during development of the RMP. The BLM also provided responses to public comments from the State of Alaska in the Proposed RMP/FEIS, Appendix U, Public Comments and BLM Responses.

6.2 State's Issue Excerpt Text, Alaska Wildlife Action Plan:
The Plan is also inconsistent with the Alaska Wildlife Action Plan (2015), which identifies certain sentinel species as indicators of ecosystem health and environmental change.

The Alaska Wildlife Action Plan identifies data acquisition as a high priority conservation action and identifies species (primarily avian) predicted to be most affected by habitat loss in the next few decades, identifying these as "sentinel" species that show shifts in distribution or changes in abundance as a result of climate change. None of the species identified by BLM in the Wildlife Action Plan are included among the species BLM identifies in the CYRMP.

In Item #3[2] of the MMOU, the BLM specifically agreed to recognize ADF&G as the primary agency responsible for policy development and management direction relating to the uses of fish and wildlife resources on State and BLM lands.

Not only was ADF&G not consulted on identifying priority and important species, but the document itself identifies different species as priority species in different sections (see Table 2-4 Wildlife and Section 3.2.7 Wildlife).

BLM Response:

The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The Proposed RMP/FEIS, Section 3.2.7 Wildlife, states that "Wildlife population management is under the authority of the Alaska Department of Fish and Game, but BLM manages wildlife habitat on federal land to sustain viable wildlife populations."

The BLM defines priority species as species in the planning area that are recognized as significant for at least one factor, such as: density, diversity, size, public interest, remnant character, or age (BLM Handbook 1601). The Proposed RMP/FEIS identifies moose, caribou, beaver, and Dall sheep as priority species.

The 2015 Alaska Wildlife Action Plan defines sentinel species as species that are used as indicators of ecosystem health or environmental change. The BLM reviewed the State's sentinel species. There are no specific management provisions in the State's wildlife action plan with which the Proposed Plan would conflict despite the BLM using priority species instead of the State's sentinel species.

The BLM's records document numerous communications between the BLM and ADF&G during the RMP alternatives development (2017 through 2018), State review of the internal version of the Draft RMP, followed by a public comment period where the State (including ADF&G) submitted lengthy comments. The BLM responded to those comments and incorporated those comments into the Proposed RMP/FEIS.

6.3 State's Issue Excerpt Text, Master Memorandum of Understanding:

This MOU reiterated the agreement ADF&G had with BLM to communicate on land use planning and the determination of sustainable fish and wildlife populations and emphasize that BLM best management practices to conserve fish and wildlife and their habitat will be developed in collaboration to achieve state goals and objectives (Item #10).

BLM Response:

---

[2] Item #3: To recognize the Department as the primary agency responsible for policy development and management direction relating to uses of fish and wildlife resources on State and Bureau lands, pursuant to applicable State and Federal laws.

The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The BLM recognizes that the Master MOU states, "that the taking of fish and wildlife by hunting, trapping, or fishing on Bureau lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with Bureau regulations."

The Proposed RMP/FEIS, Section 3.2.7 Wildlife, states that "Wildlife population management is under the authority of the Alaska Department of Fish and Game, but BLM manages wildlife habitat on federal land to sustain viable wildlife populations." The BLM will continue to follow all laws, regulations, and policies, as well as executed agreements. There is no inconsistency in the Proposed RMP to address.

7. The Plan is inconsistent with the goals of the John D. Dingell, Jr. Conservation, Management and Recreation Act: The plan fails to outline how it is expanding general hunting and fishing opportunities, as required in the John D. Dingell, Jr. Conservation, Management and Recreation Act.

7.1 State's Issue Excerpt Text:

The Governor's letter addresses details of the State's scoping comments from January 2013. The Governor's letter points to the need to expand recreation in compliance with the Dingell Act as well as allow for native allotment selection. The State disagrees with the CYRMP's analysis that conveyance of federal land to the State could result in impacts on hunting and wildlife viewing.

No reference is made to the direction Congress gave in Title IV to expand opportunities for recreation, hunting, and fishing on Federal land. In fact, the FEIS spends more time discussing lost recreational opportunities as the designated SRMA areas are smaller in size. Discussion also focuses on lost recreational opportunities that could occur if the Dalton Highway Corridor is conveyed. All these discussions are ambiguous with no supporting data. Hypothetical speculation is rampant in the document stating, "Transportation and utility corridor development could interfere with hunting and wildlife view opportunities…" (page 3-183). This hypothetical situation leaves an underlying, inaccurate sense the State has no interest in maintaining hunting, fishing, trapping, and wildlife viewing opportunities, which given the State's popularity for both activities is unwarranted.

BLM Response:

The State's identification of this issue is not a consistency issue per 43 CFR 1610.3-2 as it does not pertain to an inconsistency with State plans; however, in the interest of open discussion, we will respond.

The Proposed RMP/FEIS has the following recreation goals (Table 2-6, Recreation and Visitor Service):

1) Require that the Recreation and Visitor Services Program supports a diverse array of recreation activities that enhance the quality of life for users.
2) Facilitate greater well-being and economic benefits within communities. Support sustainable economic growth and assist with diversifying and stabilizing local communities through collaboration with community networks of service providers.
3) Promote public health and safety by managing for accessibility of recreation sites and for clean facilities.
4) Provide a variety of dispersed and developed recreation opportunities and experiences, while sustaining the recreation resource base and minimizing resource impacts resulting from recreation. Improve access to appropriate recreation opportunities on public lands, including partnered lands and waters.

The BLM's implementation of these goals has the potential to expand opportunities for recreation, hunting, and fishing on Federal land. Further, by not recommending full revocation of PLO 5150 and the ANCSA 17(d)(1) withdrawals, the Proposed RMP/FEIS maintains that recreation, hunting, and fishing opportunities along the Dalton Highway Corridor.

BLM Library
Denver Federal Center
Bldg. 85, OC-521
P.O. Box 25047
Denver, CO 80225